



The Journal

The Society of Architects.

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INCLUDING

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FOUNDED 1884. INCORPORATED 1893

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No. 37. Vol. IV.]

NOVEMBER, 1910.

New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Beales Competition, Bournemouth.

Unsatisfactory Conditions.

The Council of The Society of Architects desire to point out that the conditions of this Competition are so unsatisfactory that they urge upon the Members the desirability of not competing. A similar notification has been issued by the R.I.B.A., so that the Competition is as the *British Architect* points out, practically banned by both bodies.

It only remains for the members to loyally support the Council of the respective bodies.

The Building News suggests that the remedy for unsatisfactory Competitions is the passing of a real Registration Bill, such as would bring every practising architect within its scope, rendering everyone amenable to certain laws or rules of practice, so that any architect taking part in a competition which the Institute condemned could be dealt with by some body corresponding with the General Medical Council, as being guilty of conduct "infamous in a professional sense." A Bill which merely gave control over the present members of the Institute and Society would do nothing but emphasize the present evil. All practitioners must, of necessity, be included, if happenings like the Acton competition are to be prevented; and the sooner the necessary steps are taken the better.

We may point out that in America it is "unprofessional" to take part in any Competition banned by the American Institute of Architects.

Opening of the New Premises.

The Society's new premises will be formally opened on Wednesday, November 16th, 1910, when the President (Mr. Geo. E. Bond, J.P.) and Council have invited members and ladies to a Conversazione. The reception is at 8.30 p.m., and there will be an exhibition of students' work and vocal and instrumental music.

Sketching Visits.

The fact that many of our more ardent sketchers were unable to attend the sketching visit to Southfleet on September 10th, it was not so successful as previous visits in point of numbers. The excellent weather enabled those who attended to spend a very enjoyable afternoon, and many sketches and photographs of the manor house, dating from 1639 A.D., the old half timber house, and of the church were made.

The visit to Waltham Abbey on Saturday, September 24th, was more satisfactory, there being a very good attendance of members and students, while the weather was glorious. Many sketches and photographs of the Abbey were taken, the 14th century doorway in the south transcept attracting the attention of most of the party. When the light began to fail the party assembled for tea, after which a liesurely stroll back to the station through the warm evening air was a very pleasant termination to an altogether delightful afternoon.

Architectural Prospects in South Africa.

We hear from a reliable source that there is at present a dearth of well trained assistants in some parts of South Africa. Our informant has had some trouble in getting a man who is experienced in quantity surveying and, he is of opinion that men with various first-class qualifications could readily place themselves in different parts of the country. Experienced engineers are also wanted, particularly those who can design steelwork and take out the stresses and calculations.

Salaries vary from £22 10 0 to £30 per month inland, but are less at the coast as living is cheaper there.

Rhodesia, Natal and Transvaal are at present moving along quietly and prosperously. The Government have in hand a great amount of work. There is no opening for partly trained or incompetent men, but good men are wanted.

Proceedings.

THE Twenty-sixth Annual General Meeting of The Society of Architects was held at 28, Bedford Square, W.C., on Thursday, October 20th, 1910, at 8 p.m.

THE PRESIDENT, Mr. Geo. E. Bond, J.P., having taken the Chair, the minutes of the previous meeting were taken as read, and were confirmed and signed.

Twenty-five nominations for membership and seven for studentship were announced.

The President announced that on the 16th November, the Society's new premises would be formally opened, when a Conversazione would be held and he expressed the hope that as many Members as possible would attend.

The ballot was then taken, and the following candidate was declared to be duly elected:

As a Member:

CLARKE, JOHN DANIEL, A.R.I.B.A.,

la, Compton Street, Eastbourne.

The Council's Annual Report was then read by the Secretary.

The Chairman thought the Council had been able to show a satisfactory result of their work during the year. It was a source of great satisfaction to them to know that the Society had a home of its own and he sincerely hoped that it would be the means of largely increasing its Membership and influence. Attention had been called in the report to the work of the Council in conducting the Society's affairs and in particular he thought their hearty thanks were due to Messrs. Percy B. Tubbs, F.R.I.B.A., and E. J. Sadgrove, F.R.I.B.A., for the energy they had expended, and the time and attention they had paid to the carrying out of the contract for their new premises.

Mr. G. A. T. Middleton, A.R.I.B.A., Past Vice-President (Member of Council), in moving the adoption of the report said it was the most exhaustive and satisfactory one ever put forward, and further elucidation of it might be made in the form of answers to any questions which members might presently ask. It was particularly satisfactory to them to have enrolled during the year two Honorary Members of such distinction as Sir Edward Brabrook and Sir Willem van Hulsteyn, the latter being instrumental in securing the passage of the first real and thorough Registration Bill ever passed by any Government, and although the Act only applied to part of South Africa for the present, there was a great hope there—in which they would all join—that it would in due course be extended to the whole of that country. No doubt Sir Willem van Hulsteyn, who had done so much for architects in the Transvaal would continue his efforts in that direction, and it remained for the Society to follow the lead given them by, as it were, its own offspring. There was, he thought,

immeasurably greater hope of a satisfactory Registration Bill passing within the next few years than there ever had been in the past. They had waited something like twenty-six years since the Society was founded. The medical profession waited thirty years, so that they were still four years ahead of the doctors. He believed that if a Registration Bill was passed it would be with the absolute concurrence of practically every architect in the country.

Mr. G. A. Birkenhead (Member of Council) seconded the adoption of the report, and said it had afforded him great satisfaction to see the amount of work which the Council had carried through during the year. They were much obliged to those gentlemen who had so satisfactorily dealt with the question of the Society's new premises, which it was a delight to see.

MR. ELLIS MARSLAND (Past Hon. Secretary) asked whether the Society was represented at the Town Planning Conference, and whether they were officially invited. He in common with other members of the Society received a circular in regard to the Conference, and among a list of gentlemen who had been invited to act as Honorary Vice-Presidents of the Congress, he failed to find the name of the President of The Society of Architects. He enquired whether the President had been invited by the Institute to become a Vice-President of the Conference, and also whether the Society was officially invited to be represented, seeing that at least one of their own members was taking an active part in the proceedings.

THE CHAIRMAN said that the Society was not officially invited to take any part in the Conference, but as individual architects were asked to become members of it. He, as an individual member of the Society became a member of the Conference, and the Society appointed the Secretary to represent them, but they were not officially invited to be represented as a Society.

No further question being asked, the President put the motion to the meeting, and the report was unanimously adopted.

The Scrutineers, Messrs. Ellis Marsland Member) and E. W. Harvey Piper (Hon. Member), presented their report, showing that one hundred and twenty-eight voting papers had been received, of which six were invalid.

The result of the voting was as follows:-

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,, Treasurer.	SADGROVE. E. J., F.R.I.B.A.	 122
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TUCKER. B. R., M.R.SAN.INST	115	LOVELL. R. G		106
(Past Hon. Treasurer)		DAVIES. R. CECIL		103
BARE. R. GEO. (Past Hon. Librn)	112	LEEST. E. M., J.P		100
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The Scrutineers recommended that in future the ballot papers be perforated above the voters' signature at the foot.

THE PRESIDENT intimated that the omission was probably an oversight on the part of the printer, as the papers before him were perforated as in former years, and it appeared that some had been overlooked.

MR. GEO. E. BOND, J.P. (President) thanked the Council and Members of the Society very sincerely for having elected him for a third year as President of the Society. He felt that the Presidency should not in the ordinary way remain in the hands of one individual for three years, but on this occasion there were circumstances which necessitated to some extent a little deviation from that view. It was felt that the Presidential Chair should this year be occupied by a member who was not a member of any other architectural body, and it was that fact which induced him to accept nomination for another year. He was extremely obliged to the members and to the Council for unanimously electing him to the office.

MR. A. H. Salisbury (Member) proposed a vote of thanks to the retiring Officers and Council, and said that in addition to the report of the Council the Members were kept in touch with the work of the Society by means of the *Journal*, and he thought the work of the past Session was very satisfactory indeed. He was personally much gratified that it should be necessary for Mr. Bond to retain the Presidential Chair for the third year, as showing in a fitting way the appreciation of the general body of Members of the Council's work.

MR. H. A. WHITBURN (Member) seconded the proposition, which was carried unanimously.

MR. ARTHUR C. RUSSELL (Member), in proposing a vote of thanks to the Honorary Officers of the Society, said it gave him much pleasure to do so because from the report he gathered that they had had a strenuous year both with outside and domestic matters, and the least they could do was to give their hearty thanks to the Honorary Officers who undertook such a large share of the work.

MR. J. W. Rowley (Member) seconded the proposition, which was carried unanimously.

The Secretary intimated that Col. Leslie and Mr. Mead had been called away since the afternoon meetings, and that Professor Adams was unable to be present through illness.

Mr. Percy B. Tubbs, f.r.i.b.a. (Vice-President), said he was sorry that the Honorary Officers were not there to respond for themselves, but he was obliged to the members present for their vote of thanks so far as it applied to himself. They had all done their best in the affairs of the Society, and with regard to the new building he thought it was quite successful and very convenient. They were not at the moment proceeding with the Hall in the rear, as the rooms they were occupying were sufficient for the Society's requirements for the present. The premises would lend themselves very well to every sort of meeting they were likely to hold.

Mr. Edwin J. Sadgrove, f.r.i.b.a. (Honorary Treasurer), tendered his thanks to the meeting and said that it had given him a great deal of pleasure to do what he had for the Society, but being practical men they would realize the fact that although the building was put up and they were in occupation, the day of reckoning with the builder was not yet passed, and in all probability the most serious work was yet to come. He was, however, quite sure that Mr. Tubbs and himself would pull together and bring the matter to a satisfactory conclusion. He sincerely hoped that members would do all in their power to appreciate the little they had done in regard to the Society's new premises by helping the Society to increase its membership and to make known the fact that the Society had suitable rooms for arbitrations and so forth, and as he had been appointed Honorary Treasurer it would give him a great deal more pleasure than perhaps the last Honorary Officer had experienced in having more work to do so far as handling additional funds was concerned.

Mr. H. V. Milnes-Emerson, A.R.I.B.A. (Member), proposed a vote of thanks to the Scrutineers, Messrs. Ellis Marsland and E. W. Harvey Piper, for their work in scrutinising the ballot papers on behalf of the members.

MR. W. Scott-Deakin, f.r.i.b.a. (Member), seconded the proposition and Mr. Geo. E. Bond, J.P. (President), in putting the proposition to the meeting referred to the fact that for some years Mr. Sidney Marsland had been associated with Mr. Harvey Piper as Scrutineer of the ballot, but was on this occasion unable to be present owing to illness, and Mr. Ellis Marsland had very kindly consented to act in his place.

The proposition was carried unanimously.

MR. HARVEY PIPER (Hon. Member), replying for the Scrutineers said that the work occupied some time but they took great interest in it and were always able to arrive at a satisfactory result.

MR. Ellis Marsland (Past Honorary Secretary) proposed a vote of thanks to the Secretary, Mr. McArthur Butler and his staff. All of them knew that the success of a Society such as theirs depended very largely upon the Secretary and staff, and in Mr. Butler they possessed a courteous and efficient Secretary who was always ready and willing to help or to give any information to any Member of the Society, and beyond that the work of the Society was thoroughly well done and in a satisfactory manner. He wished also to include the very able staff which assisted the Secretary, more so on this occasion, because a very large amount of work had evolved upon them in moving the business of the Society to their new premises.

MR. E. W. HARVEY PIPER (Honorary Member) seconded the proposition and said he was one of those who had worried the staff on many occasions, but he had always been treated with that courtesy which one expected in the Society.

The Chairman in submitting the proposition to the meeting referred to the close attention which the staff gave to their duties. The proposition was then carried unanimously.

Mr. C. McArthur Butler, f.c.i.s. (Secretary), in returning thanks on behalf of the staff, referred especially to the services of the Assistant Secretary, Mr. W. E. Wanner.

The proceedings then terminated.

Twenty-sixth Annual Report of the Council,

November, 1909-October, 1910.

URING the year your Council have held eleven Meetings of which the Council elected last October have held nine. At their first meeting in November last, the following Standing Committees were appointed:—Literature, Examination, Practice, Finance, General Purposes and Registration. Over fifty Committee Meetings have been held; members will therefore realize that their representatives are called upon to devote a considerable amount of time to the Society's affairs.

Forty-three Members, two Honorary Members, and forty-five Students have been elected during the past twelve months, and after allowing for deaths, removals and resignations, the total membership stands at one thousand and thirty-two, an increase of thirty-two during the year.

The abandonment of the May meeting on the death of the late King, caused a number of applications to be deferred until the autumn, which affected the membership to some extent.

The following gentlemen have honoured the Society by accepting Honorary Membership:—SIR EDWARD BRABROOK, President of the Society of Antiquaries, and SIR WM. VAN HULSTEYN, KT. M.L.A., of Johannesburg.

Your Council regret the loss by death of the following members during the past year:—P. A. Jolly, Wansford; Gilbert S. Doughty, London; W. R. Mallett, F.S.I., Bromley (Past Member of Council and Examiner); Robert Walker, J.P., Cork (Past President); H. E. Chevallier, Nice (Hon. Member); J. Hubert, Mons. (Hon. Member); George Thomas, F.R.I.B.A., Hon. Member (Past Member of Council), Cardiff; Adolphus Curry, Jersey (Past Member of Council and Local Hon. Secretary; Obituary notices have appeared in the Journal.

Previous to the election of the Officers and Council at the commencement of the Session, your Council received with the greatest regret an intimation from Mr. Ellis Marsland, that he would be glad, owing to pressure of other engagements, to be relieved from the duties of Honorary Secretary of the Society, which he had held for so many years, though he would still remain a member of the Society.

Your Council, though reluctant to do so, had no alternative but to accept Mr. Marsland's resignation of office, and in doing so they placed on record their appreciation of his services and asked him to accept the only tangible proof which they were able to give of them, viz., the Gold Medal of the Society.

The general body of Members, however, were not satisfied with this, and as soon

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as Mr. Marsland's decision became known, steps were taken to further recognize his services, and a presentation of plate was made to him.

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Mr. Marsland's place as Honorary Secretary has been filled, but the services which he has rendered to the Society are such as cannot adequately be acknowledged, and it is hoped that he may presently be induced to once more serve the Society in some official capacity. Mr. Marsland's services, particularly in the cause of Registration, are too well known to need further reference here.

Registration.—The policy of your Council on the question of Registration was fully set out in your President's remarks at the Annual Dinner, and the question is one which they have had under consideration during the past year. The time has not been propitious for dealing with the matter in Parliament, but progress has been made in other directions, and your Council feel that the way is being gradually cleared in the direction of a more united profession on this very important question.

An official statement by your Council which was published in the *Journal* shows that they have no intention of departing from the policy which the Society has always pursued in regard to Registration, and it may again be stated that any Registration Bill which may be promoted elsewhere cannot be successfully carried through without the assistance of the Society.

Members of the Society may be assured that their Council will most carefully watch their interests and take effectual steps to block any measure which will adversely affect them. Preparations are already in hand for an active propaganda in connection with the Society's Bill during the forthcoming Parliamentary Session, and the Bill is undergoing revision with a view to amendment where necessary.

South African Branch.—The Third Annual Meeting of the South African Branch was held in October last, a report of which was published in the December issue of the *Journal*. Mr. Robert Howden was re-elected President, and Mr. E. H. Waugh, Honorary Secretary; Mr. G. S. Burt Andrews was appointed Honorary Treasurer.

The membership is increasing, and the Branch is doing useful work, both for the Society and the profession generally in South Africa. Your Council desire to thank the members of the Branch for their services which have been of the greatest value.

In December last an examination for membership was held in Johannesburg, when three candidates obtained full passes and one a sectional pass.

During the year, Sir Willem van Hulsteyn, Kt., M.L.A., Johannesburg, was elected an Honorary Member of the Society, in recognition of his services in piloting the Architects' Registration Bill through the Transvaal Legislature.

Death of King Edward VII.—Your Council submitted an address of condolence with the Royal Family on the death of King Edward VII., and also sent to His Majesty King George V. a congratulatory address on his Accession

to the Throne. Both these addresses were graciously acknowledged, and His Majesty was good enough to express his appreciation of the beauty of the Society's address of congratulation.

Representation at Congresses.—Your Council appointed Delegates to represent the Society at the following Congresses:—

ROYAL INSTITUTE OF PUBLIC HEALTH CONGRESS, Birkenhead, July 18th-23rd, 1910: Mr. Walter W. Thomas, J.P. (Past President); Mr. R. Cecil Davies (Member of Council). ROYAL SANITARY INSTITUTE CONGRESS, Brighton, September 5th-10th, 1910: Mr. E. J. Hamilton (Past President, Local Hon. Secretary); Mr. T. R. Richards, F.R.I.B.A. (Past Member of Council).

The Garden Cities and Town Planning Association invited the Society to send Delegates to the Town Planning Conference, to be held at the Guildhall, on December 10th, and to appoint Delegates to attend a meeting to discuss the formation of a Central Garden City Planning Body, for the purpose of advising on the "Development of Towns." Several Members of Council attended the Conference and the Meetings.

The Society was also represented at a Meeting convened by the Lord Mayor on the Apprenticeship question, and at the Town Planning Conference in London, organized by the R.I.B.A. in October of this year.

Students' Section.—The Annual General Meeting of Students was held at St. Bride's Institute, E.C., on November 8th, 1909, when the Committee were elected, and Mr. B. R. Tucker, M.R.SAN.INST. (Past Hon. Treasurer, Member of Council), was elected Chairman. This was followed by a social evening, when by kind invitation of the President, the Students and a number of Members were able to enjoy a very pleasant gathering.

Specimens of the work done by the Students in connection with the Travelling Studentship, Architectural Scholarship, Sketching Parties and Correspondence Classes, were on view and the Examiners were present and explained the working of the classes. During the evening the Travelling Studentship Silver Medal and other Prizes were presented.

Several Sketching Visits have been organized to places of interest near London by Mr. H. Y. Margary, the Hon. Secretary of the Students' Section.

The Travelling Studentship Competition again attracted a satisfactory number of entries, sixteen sets being received and adjudicated upon. The subject set was "A Golf Club House" to accommodate 175 Members at a cost not exceeding £4,000. Mr. D. W. Coombs, of Bournemouth, who secured the first place, selected York and district for his three weeks' sketching tour, and on submitting his work the award has been confirmed. The balance of the premium and the Silver Medal will therefore be presented to Mr. Coombs in due course.

The Prize of the value of £3 3s., offered by Mr. Edgar M. Leest, J.P. (Member of Council), was secured by Mr. Harold Phayre, of Shrewsbury, for his design for "A Village Inn."

The whole of the designs were exhibited in London during the week commencing June 6th, and the majority of them were subsequently shown at Devonport, Cardiff and Wolverhampton, where they attracted a good deal of attention.

Your Council are much indebted to the following Members and others who organized the Exhibitions and Sketching Visits, and helped to make them a success:—Mr. Edgar M. Leest, J.P., Devonport (Member of Council), and the Mayor of Devonport (Alderman Littleton). Mr. Cholton James, F.R.I.B.A. (Past Vice-President, Member of Council and Local Hon. Secretary), Cardiff. Mr. G. A. Birkenhead (Member of Council and Hon. Secretary of The Cardiff, South Wales and Monmouthshire Architects' Society). Mr. W. J. Oliver, Wolverhampton (Local Hon. Secretary), the Secretary of the Education Committee, Wolverhampton, the Headmaster of the School of Art, Wolverhampton, and Mr. H. Y. Margary, the Hon. Secretary of the Students' Section.

The Students' Committee have submitted a scheme for the development of the Section and the amendment of the Examination Syllabus, for the consideration of your Council.

Literature Committee.—The Literature Committee have held four Meetings, and at their first meeting they elected as Chairman, Mr. E. J. Partridge, F.S.I.

During the past Session papers have been read and discussions held on the following subjects. The paper on "Garden Planning," by Miss Dunington being the first occasion on which a woman lecturer has addressed the Society:—

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1909-Nov. 11th. Presidential Address. By Mr. Geo. E. Bond, J.P.
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" Dec. 9th. "Town Planning." By Mr. RAYMOND UNWIN (Member).

1910-Jan. 13th. "The Measurement of Illumination; Daylight and Artificial."

By Mr. Percy J. Waldram, F.S.I.

" Feb. 10th. "Garden Planning in Relation to the House."

By Miss Lorrie Dunington.

- ,, March 10th. "The Art of the Plasterer." By Mr. Geo. P. BANKART.
- " April 14th. "Steel Construction." By Mr. S. Bylander.

The Seventh Ordinary Meeting, called for May 12th, was abandoned owing to the death of the late King Edward VII.

Considerably over three hundred volumes have been issued from the Loan Library, many of them through the Post. Gifts of books and donations to the Library Fund have been received from Messrs. B. T. Batsford, T. Fisher Unwin, Butterworth & Co., Raymond Unwin, T. Potter, F. Rings, A. H. Winterburn, F. R. Radford, R. J. Lovell, H. C. H. Monson, C. M. Davies, T. J. Jones, P. D. Prior, J. Wilding, T. Bright, W. R. Davison, G. A. T. Middleton, A.R.I.B.A. (Past Vice-President), Professor Henry Adams, M.INST.C.E. (Hon. Treasurer), R. W. Coventy Dick (Past Member of Council), S. W. Kershaw, M.A. (Hon. Member), and others.

A book-plate designed and printed by Messrs. Waterlow & Sons, under the direction of Col. F. S. Leslie, R.E., Hon. Secretary, in the form of a reduced facsimile of the Certificate of Membership is now in use.

Your Council, after careful consideration, have decided that the new Volume of the *Journal* which commences in November shall be identical in size and style with the present issue but be printed on smooth paper so as to facilitate the reproduction of half-tone illustrations in the text. The *Year Book* is to be increased in size to correspond with the *Journal*, but reduced in bulk by the omission of the Memorandum and Articles of Association. These have been reprinted from the present *Year Book* and are now issued as separate documents. The two publications in future will be uniform in style and size.

Examination Committee.—The Examination Committee have met eleven times, and at their first meeting appointed as Chairman, Mr. E. C. P. Monson, F.R.I.B.A.

Examinations to qualify for Membership were held during March and October in London, Manchester, Oxford, and Cardiff, and during December in Johannesburg, when eleven candidates qualified for membership, and seventeen obtained Sectional passes. The following Members organized the Centres or acted as Moderators:—London, Col. F. S. Leslie, R.E. (Hon. Secretary), and Mr. B. R. Tucker, M.R.SAN.INST. (Past Hon. Treasurer, Member of Council); Manchester, Mr. A. J. Murgatroyd (Local Hon. Secretary, Member of Council); Oxford, Mr. G. A. Harrison (Local Hon. Secretary); Cardiff, Mr. Cholton James, F.R.I.B.A. (Past Vice-President, Local Hon. Secretary, Member of Council), and Mr. G. A. Birkenhead (Member of Council); Johannesburg, Mr. E. H. Waugh (Hon. Secretary), and the Board of Examiners of the South African Branch of the Society.

To fill a vacancy on the Board of Examiners caused by the death of the late Mr. W. R. Mallett, F.S.I., Examiner in Section III., Contracts and Specifications, Mr. J. Bartlett, Examiner in Architectural History, agreed to take Section III., and Mr. H. V. Milnes Emerson, A.R.I.B.A., was appointed Examiner in Section I. (b), the position vacated by Mr. Bartlett.

Professor Adams being at the time ineligible as an ordinary member of Council, the Society lost his services as Chairman of the Examination Committee, though he remained a member of that Committee and had a seat on the Council as Hon. Treasurer.

The Examination Syllabus has been revised and the question of the re-organization of the scheme of Examination is under consideration. Your Council have decided to discontinue the preparation of the Worked Answers and their publication in the *Journal*.

The Correspondence Classes completed their Third Year in June last, when the following Students were awarded the prizes offered by your Council:—

F. P. Taylor (London), First Year's Course, £1 1s.; Harold Phayre (Shrewsbury), Second Year's Course, £2 2s.; J. Slater (Blackburn), Third Year's Course, £3 3s,

Your Council have decided to continue the Classes for another Session, and would call the attention of Students to these facilities for improvement, which are placed within their reach at a nominal cost.

Arrangements were made for the Scholarship Examination to be held on the day previous to the Spring Membership Examination, and for candidates to sit at any centre, an entrance fee of 2s. 6d. being charged to those who were not Students of the Society. The examination was held on March 21st at Bath, Gloucester, Sheringham, Southend, and Halifax, but the Committee were unable to recommend any candidate for the Scholarship.

In view of the fact that for the second time the Scholarship has been withheld owing to the small number of entries, and the low standard of the work submitted, your Council have decided to discontinue the Scholarship, and to substitute for it an Annual Prize of the value of £10, for measured drawings and sketches. The Competition is to be restricted to Students of the Society, and the maximum age limit will be twenty-three. The drawings are to be submitted not later than October 1st, in each year.

Practice Committee.—The Practice Committee have met thirteen times, and at their first meeting they elected Mr. Edwin J. Sadgrove, F.R.I.B.A., as Chairman.

Your Council have on the recommendation of the Committee taken steps during the past year to get the conditions of unsatisfactory competitions modified so as to be brought into line with the views of the Society and of the Royal Institute, and in this matter the two bodies are working together with a view to securing the co-operation of their Members in avoiding competitions, the conditions of which are considered by the respective bodies to be unsatisfactory.

Action was taken by your Council in several cases, by inviting members not to take part in such competitions, and by suggesting to the promotors the desirability of amending the conditions.

Your President, Mr. Geo. E. Bond, J.P., was appointed Assessor in connection with the New Elementary Schools at Winchester, and Mr. G. Lawson, J.P., for the rebuilding of Beale's premises at Bournemouth. Mr. Raymond Unwin is one of the Assessors with Sir Aston Webb, for the Town Planning Competition, at Ruislip and Northwood, Middlesex.

The Committee have dealt with a number of points of practice raised by members, and have advised them on such questions as competitions, professional charges, light and air, building regulations, and other matters.

The Committee have also been asked to advise with regard to the Amendment of the Building By-laws of the City of Worcester, and have intimated their willingness to go into the matter when the new By-laws are drafted, The Committee had their attention drawn to the R.I.B.A. Licentiate Scheme by a number of members, who invited an official expression of opinion, and your Council expressed the view that it is undesirable that members of The Society of Architects should join the Royal Institute in any other capacity than that of a corporate member of that body (i.e., Fellow or Associate).

The attention of your Council was called to a case where it was alleged that a person was making use of the distinctive initials "M.S.A." and wrongly representing himself to be a Member of the Society.

After taking Counsel's opinion, your Council applied for an injunction, and the case came before Mr. Justice Joyce, who refused the application on the ground that an injunction would confer powers of too drastic a character on the Society.

As the principle involved affected not only The Society of Architects, but every other professional body similarly constituted, your Council decided to appeal. In the meantime some technical point raised after the trial rendered it necessary that the matter should again come before the Judge before proceeding to appeal, and the case was set down in the list, but was not reached before the long vacation. It will come on again probably in October.

Mr. Herbert Shepherd, A.R.I.B.A., drew the attention of your Council to the recommendation of the Committee appointed by the President of the Board of Trade under the Chairmanship of Lord Gorell, to report to the Government as to the legislation necessary to give effect to the revised International Copyright Convention, signed at Berlin in November, 1908.

Mr. Shepherd suggested that individual members of the profession should send a written request to all the Parliamentary Candidates in their constituency, asking whether, in the event of their being returned to Parliament, they would support a Bill to give effect to the recommendation of the Law of Copyright Committee, 1909, as applied to architecture in particular.

Your Council at once took the matter up at very short notice, and as a result of the prompt co-operation of the Society's Local Hon. Secretaries in the United Kingdom, a considerable number of Members of Parliament pledged themselves either to give the Bill consideration or to support it in principle.

The Committee considered a draft report from the Science Standing Committee of the Concrete Institute, setting forth a suggested algebraical notation for calculations in Reinforced Concrete, and your Council have approved in principle the desirability of standardizing the notation as suggested.

Finance Committee.—The Finance Committee have met twelve times, and at their first meeting appointed Mr. R. Geo. Bare, Past Hon. Librarian, as Chairman.

The grant of £50 made last year by the Society to the South African Branch, for the furtherance of the Registration movement in South Africa, has been repaid.

The Journal of The Society of Architects.

The Committee have had, in addition to the ordinary financial arrangements, to make provision for the completion of the New Premises, which has been done for the time being, without having to appeal to the members.

13

It is estimated that the total cost of the new premises when the entire scheme is completed, including furnishing, will amount to about £4,000, and it is the intention of your Council to presently open a Building Fund, which it is hoped will meet with liberal support.

The Society's Landlords at Staple Inn Buildings (Ground Floor Offices) have generously agreed to forego part of the last quarters' rent, which it is expected will amount to a sum sufficient to cover the cost of dilapidations.

The expenses of the Students' Section have been gone into on the expiration of the third years' course of the Correspondence Classes, and it is found that these are carried on at considerable expense to the Society. In addition, the awards to Students in connection with the Studentship, Scholarship and other competitions, and the cost incurred in connection with the Worked Answers to examination papers amount to a considerable sum, and it has been decided to discontinue the latter.

During the past year several former Members of the Society or their dependent relatives have received substantial assistance from the Architects' Benevolent Society on the recommendation of your Council, and the work of this Society should be supported by every architect. Your Council are represented on the governing body of the Benevolent Society, and being aware that the work is greatly restricted for want of sufficient funds to relieve the many cases which come forward, are considering the desirability of increasing the Society's annual contribution should circumstances permit.

As the Society's financial year does not end until October 31st, it is impossible to present the accounts with the report, but subject to audit, it is anticipated that the Balance Sheet will show an addition to the surplus of last year.

Mr. Ellis Marsland (Past Hon, Secretary) has accepted the position of Hon. Auditor.

General Purposes Committee.—This Committee has met three times, and at its first meeting appointed as Chairman, Mr. E. J. Partridge, F.S.I.

In their last report your Council were able to state that they had entered into an agreement for a lease of 28, Bedford Square, and that plans for adapting the premises had been prepared by the Society's Architect, Mr. Chas. FitzRoy Doll, F.R.I.B.A.

Since then a contract has been entered into with Messrs. Dove Bros. for the alterations, which have been carried out under the supervision of the Society's Architect.

Two Members of your Council—Messrs. Percy B. Tubbs, F.R.I.B.A., Vice-President, and Mr. Edwin J. Sadgrove, F.R.I.B.A.—were deputed to represent the Society as the building owner and to see the matter through. These gentlemen have devoted a very great deal of time and attention to the many details arising out of the contract, and your Council and the Society in general have every reason to be greatly indebted to them for the services which they have so freely rendered and which are not yet at an end.

The new premises will be illustrated in the *Journal* in due course, and in the meantime it may be pointed out that only part of the entire scheme has been carried out, the erection of the Hall in the rear of the premises having been left over for the present. It will be found, however, that adequate arrangements have been made in the present building for the accommodation of the members, both for general purposes and for the ordinary meetings.

The ground floor is occupied by the Offices and Committee Rooms, etc., the Library is housed in the basement, and the first floor is available as Members' Rooms for reading and writing, etc., and also for Council and ordinary meetings. The top floors have been adapted as a dwelling for a resident Secretary. The Offices have been removed from Staple Inn Buildings to the new premises, and the Secretary is in residence. A resident Caretaker has been appointed, and arrangements have been made whereby members will be able to obtain light refreshments at a moderate tariff.

The formal opening of the new premises will take place on Wednesday, November 16th, when the President will hold a reception.

The social functions included, besides the Students' Social Evening at St. Bride's Institute elsewhere referred to, the Society's Twenty-sixth Annual Dinner, which was held at the Holborn Restaurant on April 15th, and was largely attended. During the proceedings the Gold Medal of the Society was presented to Mr. Ellis Marsland in recognition of his long services as Honorary Secretary, together with a silver tea service subscribed for by the members as a token of their individual esteem.

The Society paid an official visit on June 23rd, to the Fine Art Section of the Japan-British Exhibition, under the personal guidance of representatives of the Japanese Commission, and on July 7th, by kind invitation of Messrs. Robt. Ingham Clark & Co., a party of members visited their Varnish Works a West Ham. A photograph of the party was taken in the grounds, and a copy was subsequently presented to each of those present as a souvenir of the occasion.

At the commencement of the Session, your Council appointed Local Honorary Secretaries in the following districts, and their services have been in many cases of great use to the Society, particularly in connection with the examinations and the extension of the membership.

Berkshire, Cheshire, Cornwall, Derbyshire, Devonshire, Dorsetshire, Durham, Gloucestershire, Hampshire, Herefordshire, Kent, Lancashire, Leicestershire, Lincolnshire, Northants, Northumberland, Oxfordshire, Shropshire, Somerset, Staffordshire, Surrey, Sussex, Warwickshire, Worcestershire, Yorkshire, Glasgow, Cork, Dublin, Cardiganshire, Carmarthenshire, Denbighshire, Glamorganshire, Monmouthshire, Jersey, Argentine Republic, British East Africa, Australia, British Columbia, Canada, China, India, New Zealand, South Africa, Tasmania.

These appointments are made annually, and your Council are prepared to receive applications from Members who wish to represent the Society in districts not already allotted. There will be vacancies for representatives in Derbyshire, Northumberland, Worcestershire and the Channel Islands for next Session.

Registration of Architects.

Mr. P. S. Worthington, M.A., F.R.I.B.A., in his Presidential Address to the Manchester Society of Architects, says the past twelve months has seen a steady advance towards registration. They have not, perhaps, been the most important time in the history of this movement, but during them steps have been taken upon the result of which much depends.

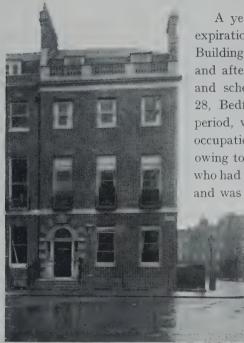
The Royal Institute has been bringing into membership as many architects as possible, either by examination or on the testimony of executed work. Of the admission of Fellows by the latter method there has been some severe criticism, not unnaturally, on the part of those who have gone through the examination themselves. But the advocates of registration—and this Society has advocated it strongly —cannot logically take exception to it, since that policy has made it necessary.

While there are obvious dangers, there are also obvious advantages in registration, which are too well recognized for me to enlarge upon them. For instance, a gentleman who supplements his calling as registrar of births and deaths with what may be architecture must, firstly, decide which calling he intends to pursue, and, secondly have it decided for him whether his architecture reaches the requirements of the Institute. Another gentleman who has turned himself into a limited company and exposes himself on notice-boards as "auctioneers, estate agents, valuers, architects, etc.," would have to make a similar choice.



28, BEDFORD SQUARE, W.C. KEY PLAN.

The Society of Architects' New Premises.



28, Bedford Square (shewing Tottenham Court Road in the distance).

behalf of the Society as the building owner.

A year ago it became necessary, owing to the expiration of the Society's lease at Staple Inn Buildings, to take steps to find other premises, and after consideration of a number of buildings and schemes, the Council ultimately settled on 28, Bedford Square, a house of the "Adam" period, which had been for many years in the occupation of an Architect, and was on the market owing to the death of the late Mr. Neale, F.R.I.B.A., who had just entered into an agreement for a lease and was commencing building operations.

The Council purchased the late Mr. Neale's interest in the property, and after due consideration, decided to place the architectural work in the hands of Mr. Fitz-Roy Doll, F.R.I.B.A., the Architect to the Bedford Estate.

Two Members of the Council, Mr. Percy B. Tubbs, F.R.I.B.A., Vice-President, and Mr. E. J. Sadgrove, F.R.I.B.A., were appointed by the Council to act on

Tenders were invited and that of Messrs. Dove Bros., Ltd., was accepted at £1,975, for adapting the premises to meet

the Society's present requirements.

The building is conveniently situated at the corner of Bayley Street and Bedford Square, and is easily reached from any part of London, there being eight Tube Stations within half-amile, of which two (Goodge Street and Tottenham Court



ENTRANCE HALL AND STAIRCASE.

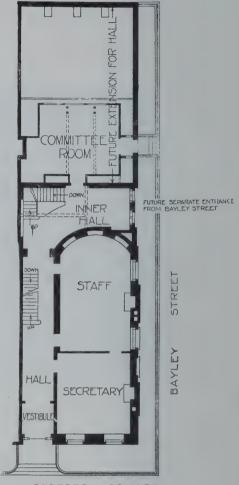
Road) are in close proximity. The entrance is from Bedford Square, by way of a vestibule into the Hall which has a stone staircase with wroughtiron balusters of characteristic design. The floor is executed in terrazzo as are those of the lavatories, cloak rooms and mezzanine passages. Oral communication is possible between the various floors by means of speaking tubes.

On the right of the entrance hall are the offices of the Secretary and staff. Both these are large and well-lighted lofty rooms, fitted with speaking tubes, telephone and electric light and bells, and heated by means of hot water radiators and open fires. The grates fixed in these rooms are Bratt's Patent "Heaped Fire" interiors, manufactured by Messrs. Bratt, Colbran & Co., of Mortimer Street, W. The doors have been fitted with Bardsley Door Checks supplied by Messrs. Nettlefold & Son, of Holborn.

The hall and staircase was decorated with "Duresco," by the Silicate Paint Co. (J. B. Orr and Co., Ltd.), The filling of the walls was treated with "B Eau de Nil Duresco," and the Dado received two coats of varnish, exemplifying how "Duresco" can take varnish treatment in a most excellent manner without any previous preparation. The



A CORNER OF THE SECRETARY'S OFFICE.

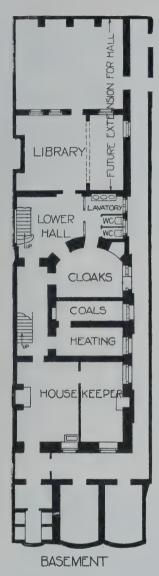


BEDFORD SQUARE

GROUND FLOOR

ceilings were treated with "L Snow White Duresco." Considering the age and irregular surface of the plastering, the general appearance of the "Duresco" is excellent.

The house contains some characteristic "Adam" detail in some of the





THE GENERAL OFFICE.

chimneypieces, ceilings, and wood-work, particularly in the Secretary's Office and the first floor rooms. There is a fine old marble mantelpiece in the former room, while in the General Office adjoining, an old marble mantelpiece of less elaborate design has been fixed.

Beyond these rooms is an inner hall or lounge forming a future separate entrance from Bayley Street and leading to a Committee Room occupying the site of a future Lecture Hall. This room is also utilized as a Publications Reference Room and is fitted with shelving for storing the *Journals* and other periodicals published by the Society. It has an additional entrance from Bayley Street which is found useful on occasions for the delivery of goods to this part of the premises. The floor has been treated by the Ronuk Polishing Company, of Portslade, and the walls and ceiling have been finished with "Zingessol" Water Paint, by Orr's Zinc White, Ltd., of Widnes, who have also used this material for

similar purposes on the walls and ceilings of the whole of the back additions, including the inner halls, secondary staircase, cloak rooms and lavatories.

A secondary stone staircase with wrought-iron balusters in keeping with the main staircase leads from the inner hall to that part of the lower ground floor formerly occupied by the kitchen and offices which have been adapted to form a suitable room for the Society's Library. The floor is covered with linoleum and the room is heated by a hot water radiator and a Bowes' Patent Pyramid Fire,

The Society of Architects' New Premises.



MEMBERS' ROOM, FIRST FLOOR.

manufactured by the Well Fire & Foundry Co., Ltd., Berners Street, the interior being steel with Chintz pattern tiles and Piastraccia slips, and a whitewood Chimneypiece of simple design.



FIRST FLOOR

The cloak rooms and lavatories on this floor are fitted with ample accommodation for hats and coats, etc., by Messrs. Hammer & Co., while the lavatories and sanitary fittings have been supplied by Messrs. Doulton & Co., of Lambeth, who also supplied the fittings for the lavatories on the upper floors. The remainder of the lower ground floor is devoted to the requirements of the heating apparatus, coal stores, etc., and accommodation for a resident caretaker.

The kitchen range and mantel register in these rooms were supplied by the Standard Range & Foundry Co., Ltd., of Watford, and New Bond Street, W.

The additions are so planned that when the Lecture Hall is built and the scheme is completed, the inner hall with entrance, cloak rooms and lavatories can be shut off from the main building, and be used for arbitrations or other meetings without interfering with the Society's occupation of the remaining part.

The first floor is reached by means of either the front or secondary staircases, these being connected on the half landing level by a corridor leading



Marble Mantelpiece in the Secretary's Office.

The Society of Architects' New Premises.



MEMBERS' AND MEETING ROOMS, FIRST FLOOR.

to the lavatories on the Mezzanine floor, which are fitted in a similar manner to those on the lower ground floor.

The iron casements and the lead glazing in the windows on the Mezzanine corridor have been executed by Messrs. Morris and Co., and Rendles Patent System of Glazing and Pilkington's Wire Woven Glass has been used in the skylight over the secondary staircase.

Provision has been made on

this floor for access to a lantern operator's gallery to be erected overlooking the proposed Lecture Hall.

On the first floor are two large rooms divided by a sliding partition and available as Members' Common Rooms and also for Committee and Council meetings and the ordinary meetings of the Society. They are fine lofty rooms, the front one containing an excellent specimen of an "Adam" ceiling and some good carved and moulded woodwork in the architraves, etc., which was brought to light after the pickling process had been applied to the wood. These rooms are fitted with electric light and bells and speaking tubes, and are heated by means of hot water radiators and open fires, and there are facilities for fixing gas stoves if required.

The two "Bowes" Patent Well Fireplaces in these rooms which were made and fixed by the Well Fire and Foundry Co., Ltd., are of plain steel pattern with raised

steps and flush hearth, and being of a very simple design, they blend well with the decorations.

The ceiling in the back room on this floor was executed by Messrs. G. Jackson & Sons, Ltd., of 49, Rathbone Place, W. This ceiling has been designed to be in harmony with an original "Adam" ceiling in the adjoining room, and they have therefore endeavoured to reproduce the same soft and delicate detail which is characteristic of old "Adam" ceilings. This has been successfully accomplished partly by moulding, and reproducing



FRONT AND SECONDARY STAIRCASES.

existing ornament, and partly by using ornament out of original wood moulds in their possession. The two "Adam" column chimneypieces were also made by this firm, and are copies of an old marble chimneypiece produced some years ago.

The walls of these rooms are coated with Anderson's "A.W.P." (Washable Water Paint). The material dries with a fine flat finish and has an artistic appearance. The outer wall being new was not thoroughly dry, but before applying "A.W.P." a coat of Anderson's Petrifying Fluid was given. The floors have been stained and polished by the Ronuk Polishing Company.

The system adopted for warming the premises is by low-pressure hot water. In the boiler-house, provided in the basement, there is one of Clements, Jeakes & Co.'s cast-iron sectional warming boilers of suitable capacity.

Radiators are provided for heating the entrance and inner halls on ground floor, the secretary and clerk's offices and committee room, and also the large rooms on the first floor. Provision is also made for hot water supply to the lavatory basins, by a separate boiler fixed in the boiler-house alongside the warming boiler.

The electric wiring has been executed by Messrs. Strode & Co., of Osnaburgh Street, W., who have also supplied the electric light fittings, some of them to special designs. The blinds have been made and fixed by A. J. Shingleton, of Kensington, and the folding ladder to the roof exit has been supplied and fixed by the Building Acts Fire Escape Co., Ltd., of 9a, Little James Street, W.C.

Some of the furniture is being made to special designs by the Bath Cabinet Makers Company of Twerton-on-Avon, Bath, and 81, Berners Street, W.

Although the premises are not yet entirely completed, it will be found that they are sufficiently ready for the members' use, and that arrangements have been made in every possible way for their convenience and comfort. The rooms are available for reading, writing, or business interviews, and light refreshments can be obtained at a moderate tariff.

The first members' meeting held in the new premises was the Annual General Meeting, on October 20th, but the formal opening will not take place until Wednesday, November 16th, when a Conversazione will be held and members will have an excellent opportunity of seeing the new home of the Society.

The rooms on the second and third floors have been adapted as apartments for a resident Secretary. The heating here is by open fires, those selected being Bratt's Patent "Heaped Fire" (Bratt, Colbran & Co.)., and the "Burkone" interiors supplied by the Standard Range & Foundry Co.

The heating for the domestic hot water supply on these floors is supplied by an Ewarts Califont, and a gas cooker takes the place of a kitchen range.

The cost of the alterations, as has already been stated, will amount to about £2,000, but it is estimated that the cost of the entire scheme, including the Lecture Hall and furnishing, will amount to double that sum, and it may be hoped that the Building Fund which has been opened will meet with liberal support.

The illustrations of the exterior and interior are from photographs by Mr. B. R. Tucker, M.R.SAN.INST. (Past Hon. Treasurer and Member of Council), and those of the details of the staircase and the mantelpiece are from photographs by Mr G. A. T. Middleton, A.R.I.B.A. (Past Vice-President and Member of Council).

The Architect and Fire Protection.

The Protection Engineer as Co-operator.

Mr. Irving K. Pond, the President of the American Institute of Architects in an address before the National Fire Protection Association at Chicago, points out that though the Architect, as such, may urge more thorough methods of building construction, in order to perpetuate his skill, yet he should contemplate philosophically the possibility of the demolition of his buildings in view of the problem of City planning for the present and the future.

The logic of City planning is as keen as that of house planning, and the distorting of the function of one part of the City must appear just as fatal to economic order, as the derangement of the functions of the various rooms of a dwelling. The subject of the relationship of the architect to substantial building and to fire protection, says Mr. Irving K. Pond, A.I.A., is one of wide significance and with many ramifications.

When civilization is established and we cease to be a restless body pushing forever toward the frontier, our cities will partake more of the nature of fixed abiding places and less of the nature of the camp, as our residences to-day are smacking more of the permanency of buildings and less of the ephemeralism of the tent. At such time sanely conceived civic centres will be established, calling for permanent structures suited to the needs of the locality and connected with other similar centres by great arteries of intercommunication, which themselves will be of a permanent and lasting nature. The industrial quarters, the residential quarters, the wholesale quarters will be distinctly differentiated as are the apartments of the logically designed dwelling, and will be susceptible of logical and predetermined growth.

The Doom of the Sky-scraper.

When the laws of economics shall have been understood, when each man's duty to his neighbour and to the community shall be as thoroughly recognized as are the rights he arrogates to himself, the overtopping commercial structure in the centre of other commercial structures or in the centre of the residence district will be a thing of the past. In fact, in the logical city over-topping commercial structures will not, as now, add their disfigurement and their problems of transportation and of sanitation to the neighbourhood they infest, and the matter of protective construction and protective appliance will be simplified.

It would seem impossible that the city should develop without certain destruction of existing forms and functions, and it will be seen that this condition should be recognized in the problem of construction and of protection, especially in the earlier stages of the city's development. The possibility that factories or that apartments

may be torn down within a comparatively short period of time, to be replaced by buildings more extensive and devoted possibly to other uses, must affect the character of the construction, and to insure against great economic loss in the wreckage of existing structures the protection of life and property should be made to depend more largely upon external means and appliances.

Effective Protection.

Perhaps the most effective method of protection as it affects the community generally would lie in the operation of a law making the loss or damage to extraneous property or to life to hold against the owner of the property from which the fire spreads or the damage emanates. If the title to such property were vitiated until claims had been settled there would be less argument as to the desirability of protection in specific cases, and there would be smaller need to penalize, neighbouring buildings of a higher type.

The American Institute of Architects is contemplating the formulation of a typical building code which shall be on a par with its standard form of contract and general contract conditions, and its standard specification. In this it needs the affiliation of the protection and insurance engineer. The architects' desire to build a monument for himself may in this instance be disregarded. The protection engineer, however, as represented by the National Fire Protection Association, is a necessary co-operator in any scheme of code formulation, for he has tested in his laboratory the action of the elements upon materials under the most severe conditions and can lend most valuable technical aid.

The formation of a standard building code is quite as difficult as it is desirable, for its mandates must be in general terms, susceptible of application in all sections of the country. The architect would have a more open mind to the use of certain materials; for instance, unprotected cast-iron in window mullions, or unprotected lintels supporting short spans of masonry, for he has known the metal used in these forms to stand the most severe test possible under actual conditions, whereas, under the artificial conditions of the laboratory the protection engineer has found them to fail. A liberal yielding by the architect from his point of view to that of the underwriter and a reciprocal action on the part of the underwriter would result in a code The architect would endeavour to study conof great general value and equity. ditions so as not to penalize the high-class building and legislate against the owner of such a building in favour of a neighbouring building of lower type. The high class building should be protected against the lower class building by equitable legislation and the lower class building should not be allowed to jeopardize the entire neighbourhood as well as itself. At the same time the higher type of building, especially when it runs into an inordinately high structure, should not be permitted to jeopardize the safety of life and limb within its own confines.

An Educational Propaganda.

As a practical phase of the general topic it is well to note the valuable work which the Poard of Underwriters and your Association are doing in promulgating data with reference to fre protection. In relation to this a suggestion has been made by an eminent architect that this work is too technical in its nature to reach the generality of architects and owners who naturally should, and under certain conditions would make use of the provisions. At present the information with regard to the simpler forms of fire protection is contained in large pamphlets from which it is to be with difficulty extracted and moreover the information is generally so put that it is not quite clear to any but engineers and architects who have had special practice along those lines. The few architects in the larger cities who pay any special attention to this subject, of course, keep up to the mark by special correspondence, consultation with insurance engineers and constant reference to the Board of Fire Underwriters in specific cases; but the great majority of the architects of the country know absolutely nothing about the simplest matters of fire protection methods.

A word as to certain specific architectural functions must be uttered, especially as it concerns a matter in which unenlightened and arbitrary rulings make or break. The architect is for ever struggling to encompass beauty, to endow all his forms with grace and charm; otherwise he is no architect. In this he is not aided by the underwriters' rules, which tend more and more to make the objects to which they apply more crude and ungainly. This is especially so in the matter of frames and sash and the proportions of windows. So, too, with fire doors, and their appliances; and so with many matters. In many instances the matters might be adjusted by a commission, were its ruling not to be negatived immediately by another commission. These suggestions are not uttered in a carping spirit, but to indicate that equity between man and man should be conserved, equity between associations and capital also. The ethical element will enter into the operations of even a Board of Fire Underwriters and the æsthetic element will not down where the true architect is concerned; and so it must be apparent that questions of business ethics and personal fair dealing and questions affecting public taste, inhere in the problems of the protection and the insurance engineer and the powerful association they in general so wisely represent.

An educational propaganda can best be carried on by a series of primer-like leaflets of uniform size, mailed regularly, perhaps once a month, to every architect in the National directory, and to every builder, forming in due course a portfolio of technical sheets which can be replaced from time to time as they become obsolete.

Ethics and Aesthetics.

It is not infrequent in actual practice that the means adopted or appliances installed under specific recommendation of one official of the Board of Underwriters

have been summarily rejected by another official, and there is no redress. Remove and reinstall, or up go the rates or no rates will be considered. This is rather trying to the architect who has done his work conscientously, and it forces a situation rather difficult of explanation to a client who naturally cannot comprehend the case and quite naturally conceives his architect to be at fault. Discretionary power on the part of public commissions is being considered and recommended as a panacea for modern legislative ills, and should be, where the drastic enforcement of non-elastic laws operates at the same time against private interest and public good. But on whom can such arbitrary power safely be conferred in the case of the general government? The Board of Underwriters has not to consider that question, for it need not be governed by drastic laws, but in all justice and logic may make the particular method suit the particular case.

The opening took place recently at Ogmore of a new Higher Elementary School. The building provides accommodation for 208 scholars in its six classrooms, which open into a central hall. Lecture rooms, laboratories, and manual instruction and domestic science rooms are also provided. The Schools were designed by Mr. D. Pugh-Jones, F.S.I., County Architect, Cardiff, under whose supervision the works have been executed. Mr. Pugh-Jones is also the architect for the erection of a new Higher Elementary School at Caerphilly, at a cost of £9,440. Also for a new Infants' School at Gebalfa, near Cardiff, to accommodate 168 (arranged in such a way as to be greatly extended) at a cost of £2,803.

Miss G. Kingston has opened the "Little Theatre" which has been constructed after Messrs. Hayward & Maynard's designs, in John Street, Adelphi. The Theatre is a conversion of the Banking Hall of Messrs. Coutts & Co.'s former premises, being the back portion of the Banking House which Robert and James Adam built for the brothers James and Thomas Coutts. Thomas Coutts occupied that part as his residence for many years before his death in 1822. A subway beneath William Street afforded access to the strong rooms and vaults beneath the Banking Hall, and, in 1799, Thomas Coutts obtained an Act (39 George III., c. 1) to empower him "to make a communication between his buildings on the opposite sides of William Street . . . by a covered passage to be built over the said street." The bridge has been recently blocked up. The alterations made by Mr. George J. Drummond, the free-holder, comprise the absorption of part of No. 17, John Street for foyer, refreshment rooms, etc., with an emergency exit in Durham House Street.

Reviews.

The Liverpool Architectural Sketch Book. Being the Annual of the School of Architecture of the University of Liverpool. Published by the Proprietors of the Architectural Review, Caxton House, Westminster, London. Half-crown, nett., 1910.

If Professor Reilly has done nothing else at Liverpool, he has at least imbued the Architectural School there with singleness of purpose. He aims high; it is his belief that from the very commencement of his career, an architectural student should be trained to design, to consider architecture as the greatest of the arts and to have some definite faith to work upon. He does notthink that it matters greatly whether this faith is based upon Gothic sentiment, Byzantine cleverness, or Greek purity of form. For himself, he has chosen the latter, or perhaps it would be better to say that he has selected monumental architecture as a whole, the idea of a monument being to his thinking of the first importance in making a student clearsighted. Once this idea is grasped the rest should be comparatively easy; it is a foundation upon which all subsequent practice can be built up. He does not believe in the heresy of a few years ago that the young architect should cram himself with a knowledge of all styles and the ordinary methods of constructing in all materials. These things merely bewilder and are hardly the basis of true architecture. It is the architecture that should come first, and these, if necessary, be added subsequently. It is, of course, possible to hold different views to these, and it would probably be well for English architecture if other schools could be as completely Gothic in their inspiration as the Liverpool School is Classic, provided that the inspiration be really present and the masters as competent as Professor Reilly. The present issue of the Shetch Book of the School over which he presides is ample evidence that his students are inspired, not so much by him as by the spirit of monumentalism which he has inculcated, and that, young beginners as they are, the effect of working under a definite inspiration has been to enable them to produce not merely measured drawings, but original designs as well, which would do no discredit to any draughtsman or architect in the country.

The Construction of a House. Being the Study of Building Construction, presented by means of a Set of Forty Plates containing Plans and Detail Drawings with Letterpress, of a Design for a Country House, including Motor House and Chauffeur's Lodge. By Charles Gourlay, B.Sc., (Glasgow University), A.R.I.B.A., Architect, Professor of Architecture and Building Construction in The Glasgow and West of Scotland Technical College, author of 'Elementary Building Construction and Drawing for Scotland Technical College, author of 'Elementary Building Construction and Drawing for Scotlish Students.' Royal 4to in Portfolio, price 6s. net (postage 4d. extra). Copies can also be supplied, bound, price 6s. 6d., net. (postage 4d. extra). London: B. T. Batsford, 94, High Holborn, 1910.

An exceedingly valuable book for advanced students on Building Construction has recently been issued from the pen of Professor Gourlay. His treatment of the subject is entirely different from that attempted in any work hitherto produced. He has not adopted the ordinary elementary system of describing trade by trade the usual methods of constructing therein, but has assumed that these elements are understood, and that the student requires sound practical experience of the method of preparing working drawings in an office, in which the trades are not necessarily isolated one from another. He has consequently published the complete drawings of a house, commencing with the block plan, then illustrating the working contract drawings, and afterwards giving the details of the various parts in regular sequence just as they would be produced in the office and sent on to the works for execution. If confronted with these at the outset of his career, the elementary student would probably find himself befogged. On the other hand, the man who wished so discover how to produce real working drawings, and to see in what simple ways such difficulties are overcome as arise in each particular piece of work (and are always

differing), would find a large amount of inspiration in these sheets. Nothing is shown but what is absolutely workable, and has in fact been worked to. Every little point is thoroughly thought out and nothing left to chance. The book is highly to be recommended, particularly to students in provincial and colonial offices who rarely have the chance of seeing how things are done where high-class architecture is the rule. Excellent descriptions are given of the plates, and the latter are clear and well produced, a very valuable point being that the materials to be used are shown in a discriminative way, which is as easy to understand as conventional colouring.

Town Planning Conference.

The Town Planning Conference held under the auspices of the R.I.B.A. last month, was a success in every way. Overflow meetings were the rule and all the gatherings and functions were well attended.

The Conference drew together representatives of probably every organization and institution connected directly or indirectly with the subject, and their deliberations have been made widely known and every opportunity taken of calling public attention to this important matter.

The R.I.B.A. did not hesitate to ask the Society to distribute the Conference literature to its members, but they did not extend the courtesy of an official invitation for the Society to be represented. Four years ago the R.I.B.A. gladly accepted a contribution of £100 from the Society toward the expenses of the Architectural Congress, and from time to time the Institute place themselves in the invidious position of seeking and accepting favours and assistance from a Society which apparently is not in their opinion entitled to the courtesies extended to other similar corporate bodies. We should not have referred to the subject, but that the question was raised at the Annual Meeting of the Society, and it is well that the members should be aware of the attitude of the Royal Institute in these matters.

Space does not permit us to go into the details of the Conference, but these have been already made known and we hope from time to time to publish summaries of the more important of the papers read.

The Journal

A South Wales member writes: "Am pleased to see the *Journal* not only keeping up its old standard, but improving in quantity and quality month by month."

Town Planning and Modern House and Cottage Exhibition, 1911.

There will be an architectural and building competition in connection with a Town Planning and Modern House and Cottage Exhibition which is to be held next Summer at Gidea Park, Squirrels Heath, where a Town Planning scheme was recently inaugurated by the President of the Local Government Board, the Rt. Hon. John Burns. Mr. H. H. Raphael, M.P., who some years ago presented to Romford the fine public park which bears his name, has offered a thousand guineas in prizes for the best designed houses and cottages erected in the Exhibition, and for a site plan and other designs. The gold medal of the Exhibition and £250 will be awarded for the best detached house, the building cost of which is not more than £500. There will be a second prize of £100. Another gold medal and £200 will be given for the best cottage, the cost of erecting which is not more than £375. In this class there will also be a second prize of \$\if100\$. Prizes of \$\if150\$ are offered for the house and cottage best fitted and planned to economise work and service. For a Town plan of Gidea Park, in which the houses and cottages are to be built, there are prizes of £100 and £50. There is also a competition open to builders for excellence of workmanship and construction, in which a gold medal and prizes of £100 and £50 will be awarded. Frizes will also be given for garden design, &c.

Mr. Guy Dawber, the Vice-Fresident of the Royal Institute of British Architects, Mr. H. V. Lanchester, F.R.I.B.A., the Editor of *The Builder*, and Mr. Mervyn Macartney, F.R.I.B.A., F.S.A., Editor of *The Architectural Review*, will act as judges.

Designs must be submitted not later than the 31st October. The full conditions can be obtained on application to the Secretary of the Town Planning and Modern House and Cottage Exhibition, 33, Henrietta Street, Strand, W.C.

The Society's New Premises Building Fund.

The President, Mr. Geo. E. Bond, J.P., has issued a letter to the members calling attention to a Building Fund which has been opened by the Council with the object of raising a sum of £4,000 for the purpose of clearing off the liability on the present building, and of providing for the completion of the scheme at an early date.

The building which is described and illustrated in this issue of the *Journal* is to be formally opened on November 16th, and the President hopes to be able to then announce that the greater part of the required sum has been subscribed or promised.

This is the first time that the members have been invited to contribute to any object connected with the welfare of the Society, and also the first occasion on which an opportunity has been afforded them of testifying in a material way their desire to forward its interests.

It is hoped to raise at least £2,000 within the next fortnight, and the President points out that if every member when remitting his Annual Subscription would make such an addition to it as his circumstances may fairly warrant, it would probably result in the required sum being raised at once.

Contributions should be sent to the Secretary who will be glad to receive and acknowledge donations to the fund. A list of donors and the amount received will be published in the *Journal* from time to time.

Ten years ago the Church of All Saints, Little Staughton, was struck by lightning, which destroyed the greater part of the octagonal spire and caused, in addition, much damage to the roof and interior of the Church. As the interior was already in great need of restoration, it was decided to restore this at once, and the spire was left in a truncated condition, surmounted by an oaken cap for protection against the weather. The work of rebuilding the spire is now in progress, the architect being Mr. W. B. Stonebridge, Ely Diocesan Architect.

The foundation-stone was recently laid of the new Parish Institute in St. Mark's Parish, North End. The work is being carried out under the superintendence of the architects, Messrs. Rake & Cogswell. As regards the work of extending the church, the scheme now in progress is to lengthen the nave and side aisles by the addition of two bays to the westward, giving to the building a total extra length of about 47 ft., and an additional seating accommodation of some 350. A small baptistry will be built on to the north aisle, which will be large enough to admit twenty to thirty persons attending baptisms. The new floor, together with that of the old aisles, is to be laid with wood block paving. The work is being carried out from plans prepared by Messrs. Rake & Cogswell.

Mainly about Members.

We regret to have to record the death of MR, ADOLPH CURRY, which took place August 29th last at his residence, The Retreat, Almorah.

The late Mr. Curry, who was in his sixty-third year, was educated at Victoria College, and on the completion of his studies, was articled to Messrs. Batlin & Sons, of Northampton, He then accepted a post with Naysmith & Co., of Manchester, and subsequently received an appointment by the late Marquis of Bute in connection with the Cardiff Docks, then in course of construction.

He came back to the Island in 1878, and established himself professionally as an architect in St. Helier. During the thirty two years which have elapsed he has designed and carried out many works, including the extension of the Maison St. Louis, of Highlands College, and of the Orphanage du Sacré Coeur, the Ladies' College, the Opera House, the Victoria Club, and St. Paul s Church, while he also supervised the restoration both of St. Ouen's Manor House and of St. Saviour's Church.

He was a prominent member of the old "Mechanics," now "Duke of Normandy" Lodge of Freemasons, of which he was one of the Past Masters, while he had also held high provincial rank. He was a member of the Société Jersiaise, and was a valued member of the Council, while he was also one of the oldest members of the United Club. Mr. Curry was elected a member of The Society of Architects in 1887, was a past member of the Council, and was one of those supporters who, in the early days of the Registration movement, gave time and money to the cause.

Messrs. Henry Adams & Son have been called in by the Holme Cultram U.D.C to examine and report upon the sea wall at Silloth, which is showing signs of failure.

Mr. E. J. Partridge has been appointed architect for the new receiving home to be erected by the Richmond (Surrey) Board of Guardians.

Extensions are being constructed to the Hereford Corn Exchange, for the purposes of a theatre and public hall. The building will be heated throughout by hot water, and will be lighted with electric light. The architects are Messrs. Groome and Bettington, Hereford.

The Polygon Baptist Church and Schools, Southampton, were opened last month. They are designed in Late Gothic, freely treated, facings of red pressed bricks, with Bath stone dressings. The complete scheme embraces church with lofty

Mainly about Members.

tower and spacious school premises. The buildings have been carried out for about £6,550, from designs by Messrs. George Baines & Son, architects, 5, Clement's Inn, Strand, London.

The Foundation Stones of a Sunday School were recently laid in connection with the Linthorpe Road Primitive Methodist Church, Middlesbrough. The ground floor frontage is occupied by shops. Beneath is the main school hall. A lower hall will accommodate 300 scholars, and the upper one 200 scholars. Classrooms are also provided. The estimated cost is £3,800, exclusive of furnishing. The architect is Mr. T. W. T. RICHARDSON, of Stockton.

The foundation stones have been laid of the new Primitive Methodist Sunday Schools in Linthorpe Road, Middlesbrough. Situated in a central part of the town, the site is a valuable one for business purposes, and the trustees have incorporated with the new schools four shops. The main hall will be over the shops, and will be two storeys high, having accommodation for 500 scholars. The estimated cost of the building is $\{3,800, Mr. T. W. T. RICHARDSON, of Stockton, being the architect.$

The new Latymer County Secondary School, which has been erected at Hazelbury Road, Edmonton, occupies a site of six acres, and provides for boys and girls. There are an assembly hall, accommodating 500 persons, which will also be used for art and gymnastics, six classrooms to accommodate 150 scholars, science room, balance room, manual-training room, principal's room, rooms for the staff, cycle stores, cloakrooms, lavatories, and changing rooms for both sexes. A caretaker's house is provided on the site. The buildings are of local bricks, with stone facings. The work has been carried out at a cost of £6,782, from plans prepared by, and under the supervision of, Mr. H. G. Crothall, architect to the Middlesex Education Committee.

The first premiated design in the Winchester Elementary School Competition is planned on the Central Hall system. The central hall is 50ft. 7in. by 24ft. 6in. by 20ft. to the collar, and has a small platform at the east end. Externally the building is treated in a simple and inexpensive manner, as desired by the Education Committee. The walls are wholly constructed of red brick, the only stone work introduced being in the pediments over the entrances, which will be of Bath stone. The gables are finished with plain barge boards, and the roofs are close boarded and slated. The cloakrooms, entrances and master's room are covered with asphalte on reinforced concrete flats, thus enabling ample light to be admitted to the central hall. The school will be heated by a system of hot water heating, and lighted by electricity. The scheme provides for three schools (for boys, girls and infants), designed on similar lines and so arranged that the play yards will all be under control from either the master's or mistress's rooms. The author of the design, Mr. A. Haynes Johnson, of Winchester, is one of the youngest members of The

Society of Architects, he having qualified for membership at the examination held in October last.

An eastern wing is about to be added to the College of Art at Lawriston, Edinburgh, on a site recently occupied by the cattle market. The new front will be about 150ft. in length. On the ground floor will be the Secretary's office, board-room, two halls for architecture, and on the outer angle a small conservatory. In the centre will be the sculpture hall, and an open court, another room for architecture. and a room for the head of the architectural section. On the north side will be one room for the antique and two for painting. The corresponding space on the upper floor will be occupied, on the southern front, by a museum, and three rooms for design. The central portion will consist of a sculpture hall and open court, and in the east end of the building will be a fourth room for design, and a room for the head of that section. On the north side will be a life classroom for women, a staffroom, wardrobe, etc., a second life classroom for women, a room for the head of the painting section, and a small waiting-room. In an additional small story on the north-east corner of the building will be located the classrooms for the R.S.A. life school. This will consist of a hall divided into two, with accommodation for models, Mr. DICK PEDDIE is the architect. The cost of the new part of the college, including equipment, is estimated at about £30,000.

A portrait and notice relating to Mr. Percy B. Tubbs, F.R.I.B.A., a Vice-President of The Society of Architects, appeared in The Stone Trades Journal last month, in which it is stated that Mr. Tubbs was born in 1868, and after service of his articles with the late Mr. W. Patterson, studied architecture and painting under M. Fernand Lamotte, in Paris. Further experience was acquired in the offices of Messrs. Ford and Hesketh, FF.R.I.B.A., and Messrs. Franklin and Andrews, Quantity Surveyors. Most of his work is in the City of London, where numerous blocks of offices and warehouse and factory buildings have been erected from his designs, amongst which may be enumerated thirty buildings on the site of Old Farringdon Market; Godliman House, St. Paul's; Shagghai House, Botolph Lane, Eastcheap; Demarara House, St. Dunstan's Hill; Bangor House, Shoe Lane; No. 68, Aldersgate Street. Blocks of buildings in Old Street, Ivy Lane, Fann Street, Whitecross Street, both sides of Paper Street and Cotton Street, and the recently-completed "Caslon" Foundry Buildings, Nos. 81, 82 and 83, Chiswell Street. His domestic works include the Grand Hotel, Littlestone-on-Sea, Kent; the Assembly Hall, Littlestone; Littlestone Convalescent Home; alterations and additions to St. Mary's Schools, Finchley; New Infants' Schools, Finchley; St. Paul's Parochial Hall. Finchley; New Wing to Beaulieu, Wimbledon Park, and many country and suburban residences. As an Arbitrator, and in connection with several successful appeals to the Tribunal of Appeal under the London Building Acts, Mr. Tubbs is well known.

The Journal of The Society of Architects.

Sessional Meetings, 1910-1911.

The chair will be taken at eight p.m. on the following dates:-

1910-Nov	ember 17th.*	191	1-March	9th.		
" Dec	ember 15th.	22	April	6th.		
	uary 12th.	22	May	11th.		
	ruary 9th.		October	19th.†		
	tial Address.	†	† Anniversary Meeting.			

Particulars of papers to be read at these Meetings and notices of other meetings will be published in *The Journal*.

Officers and Council, 1910-11.

The following are the Members elected by ballot at the Annual General Meeting on October 20th. The names are in alphabetical order.

President		BOND, GEO. E., J.P				Rochester.
Vice-Presidents		MURGATROYD, A. J.				Manchester.
11		TUBBS, PERCY B., F.R.I.B.A.				London.
Hon. Secretary		LESLIE, COL. F. S., R.E. (retired)				Woolwich.
Treasurer		SADGROVE, E. J., F.R.I.B.A.				London.
, Librarian		MEAD, C. H., M.R.SAN.INST.		0 0		93
Councillor		ADAMS, HENRY, M.INST.C.E.				,,
		BARE, R. GEO. (Past Hon. Libra				22
*3		Birkenhead, G. A				Cardiff.
27		CANCELLOR, B. D				Winchester.
12		DAVIES, R. CECIL				Chester.
9 ?		EMERSON, H. V. M., A.R.I.B.A.				London.
12		Inglis, T. S				,,
10		TACK, R. A.				21
12		JACKSON, C. E.				21
15		LEEST, E. M., J.P.				Devonport.
92		LOVELL, R. G				Eastbourne.
25		MIDDLETON, G. A. T., A.R.I.B.A. (London.
9.0		Monson, E. C. P., F.R.I.B.A.				22
99	a e	PARTRIDGE, E. J., F.S.I.				Richmond.
p 9		PEARSON, J. HERBERT				London.
59	e 0	SCOTT-DEAKIN, W., F.R.I.B.A.				Shrewsbury.
91		TUCKER, B. R., M.R.SAN.INST. (Pa				~
**		WILLOCK, R., F.R.I.B.A				
"	• •	WILLOCK, IC., F.K.I.B.A	• •	• •	• •	>>

Meetings and other Fixtures of the Society. Session 1910-11.

Subject to such alterations and additions as may be announced from time to time in the "Journal" or by circular.

1910.

Nov. 3rd. Committee Meetings.

,. 9th. The Society of Architects' Lodge, No. 3224, Meeting, Liverpool Street Hotel, E.C., at 5 p.m.

,, 16th. Conversazione and Opening of New Premises at 8.30 p.m.

,, 17th. Committees and Council Meetings, followed by first Ordinary Meeting at 8 p.m. Presidential Address by Mr. Geo. E. Bond, J.P.

Dec. 1st. Committee Meetings.

,. 15th. Committees and Council Meetings, followed by second Ordinary Meeting at 8 p.m.

., ,, Examinations in South Africa.

., 29th. Committee Meetings.

1911.

Jan. 11th. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.

,, 12th. Committees and Council Meetings, followed by third Ordinary Meeting at 8 p.m.

,, 26th. Committee Meetings.

Feb. 9th. Committees and Council Meetings, followed by fourth Ordinary Meeting, at 8 p.m.

,, 23rd. Committee Meetings.

Mar. 8th. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.

" 9th. Entries close for Home Examinations for Membership and Scholarship.

,, Committees and Council Meetings, followed by fifth Ordinary Meeting, at 8 p.m.

,, 23rd. Committee Meetings.

April 6th. Committees and Council Meetings, followed by sixth Ordinary Meeting at 8 p.m. Subject of paper to be announced.

,, 11th, 12th, 13th. Examinations for Membership.

,, 20th. Committee Meetings.

May 11th. Committees and Council Meeting, followed by seventh Ordinary Meeting at 8 p.m.

The Society of Architects Examination.

Qualifying Examination for Membership.

At an Examination held on October 6th, 7th and 8th, 1910, at London, Manchester and Cardiff, the following satisfied the Examiners and are qualified to make application for membership:—

Cooper. Launcelot A.,

- 7, Drayton Gardens, West Ealing, W.
- CROMIE. ROBERT,
- 3, Cavendish Road, Clapham, S.W.

The following Students have secured Sectional Certificates:—

ARCHITECTURE (Planning, Design, and Architectural History).

HEARNE. FRANK,

WILLIAMS, JOHN CLIFFORD,

BRADLEY. WILLIAM,

99, Manchester Street, Oldham, Manchester.

6, Palace Road, Crouch End, N.

222, Rishton Lane, Great Lever, Bolton.

BUILDING (Construction and Materials).

Hadley, William John, Moulding, Lewis George, Peters, Kershaw, Best, Halstead, Frondeg House, Gwaucaegurwen, Glam. 107, Broadwater Road, Tottenham, N. Technical Institute, Sheerness. 65, Market Street, Whitworth, Rochdale.

PRACTICE (Specifications, Contracts and Quantities).

WILLIAMS. JOHN CLIFFORD,

6, Palace Road, Crouch End, N.

SANITATION (Drainage, Heating, Lighting, etc.).

Hadley. William John,
Moulding. Lewis George,
Scales. Sydney George,
Taylor. Frank Percival,
Williams. John Clifford,

Frondeg House, Gwauucaeguiwen, Glam. 107, Broadwater Road, Tottenham, N. 7, Bolton Road, Eastbourne. Fairford House, Brentford, W. 6, Palace Road, Crouch End, N.

The next Examination will be held in London and the Provinces on April 11th, 12th and 13th, 1911. Syllabus on application to the Secretary.

An Examination is being held in South Africa during December, particulars of which may be obtained of Mr. E. H. Waugh, Local Hon. Secretary, Johannesburg.

The Society of Architects' Travelling Studentship. Value £25 and a Silver Medal.

Regulations and Conditions, 1911.

Candidates for the Travelling Studentship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscriptions for the current year. (The maximum age limit is 28 years.)

The Competition Drawings, upon which the Studentship will be determined, must be delivered, carriage paid, at the Society's Offices, 28, Bedford Square, W.C., not later than 6 p.m. on the first day of May, 1911, without name, motto, or other mark of identification, and must have attached thereto a plain sealed envelope containing the competitor's signature and address appended to a declaration that the drawings are the candidate's unaided work.

The plans will be numbered as received, and a corresponding number placed on the envelope, which will not be opened until after a selection has been made.

The Council will not be responsible for any damage that may occur to any plan or document, though every reasonable care will be taken.

The Studentship is of the value of Twenty-five Pounds (£25), and carries with it the Silver Medal of the Society. The holder will be required to undertake, between June 1st and October 1st, a sketching tour of not less than three weeks' duration.

The successful candidate must, within fourteen days after the award, notify the Secretary of the date of the commencement of the tour and its proposed locality, and will then receive the sum of Fifteen Pounds (£15).

A diary of the tour must be submitted with the measured drawings, sketches and notes, all of which must reach the Secretary before October 1st.

Subject to the Council being satisfied with the work executed during the tour, a further payment of Ten Pounds (£10) will be made, and the Silver Medal presented to the candidate at the first Ordinary Meeting of the Session, or some other date to be fixed by the Council.

The right to reproduce the drawings is vested in the Council.

The Studentship may only be held once by the same person.

A candidate who does not adhere to the conditions in every particular, will be disqualified.

Year Book, 1910-11.

The list of members is under revision for publication in the new issue of the Year Book. It is asked that changes of address, or other revisions, may be notified at an early date.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Students' Meeting.

A meeting of the Students of the Society will be held at 28, Bedford Square, on Thursday, November 17th, 1910, at 7 p.m., previous to the Ordinary Meeting of the Society on the same evening at 8 p.m.

Agenda:

- 1. Minutes.
- 2. Election of Chairman and Committee for 1910-11.
- 3. Other business.

Ordinary Meeting.

The First Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday, November 17th, 1910, at 8 p.m.

Agenda:-

- 1. The President to take the chair
- 2. Minutes of the last Ordinary Meeting.
- 3. Nominations for Membership.
- 4. Announcements.
- 5. Ballot for candidates for Membership and Studentship.
- 6. Presentation of Travelling Studentship Medal.
- 7. President's Address.

Light refreshments will be served after the meeting.

Journal

OF

The Society of Architects

FOUNDED 1884. INCORPORATED 1893.

Including Transactions and Architectural Notes.

No. 38. Vol. IV.

DECEMBER, 1910.

New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Society's Conversazione and Opening of the New Premises.

The Conversazione given by the President and Council on November 16th, to celebrate the opening of the New Premises at 28, Bedford Square, proved a success from every point of view.

There was a large attendance of members most of whom were accompanied by one or more ladies, and also a number of visitors, and the arrangements made for their comfort and entertainment appeared to meet with general approval.

The ground floor offices were transformed into refreshment rooms, the Library into a Smoking room, and the first floor rooms were utilized for the reception.

The guests were received by the President and Mrs. Bond, and Members of the Council, and amongst the members present were:—

Mr. Percy B. Tubbs, F.R.I.B.A. (Vice-President); Mr. Albert E. Pridmore, F.S.I. (Past President); Mr. R. G. Bare (Past Hon. Librarian); Mr. G. A. Birkenhead (Cardiff); Alderman R. Cecil Davies (Local Hon. Secretary, Chester); Mr. R. A. Jack; Mr. Herbert W. Matthews (Bath); Mr. G. A. T. Middleton, A.R.I.B.A. (Past Vice-President); Mr. E. C. P. Monson, F.R.I.B.A.; Mr. E. J. Partridge, F.S.I. (Local Hon. Secretary, Richmond); Mr. E. J. Sadgrove, F.R.I.B.A. (Hon. Treasurer); Mr. B. R. Tucker, M.R.SAN.INST. (Past Hon. Treasurer and Chairman of the Students' Committee); Mr. R. Willock, F.R.I.B.A.; Mr. H. V. Milnes-Emerson, A.R.I.B.A.: Col. F. S. Leslie. R.E. (Hon. Secretary); Mr. Ellis Marsland (Past Hon. Secretary and Hon. Auditor); Mr. T. S. Inglis; Mr. C. McArthur Butler, F.C.I.S. (Secretary); Mr. E. F. Hubert; Mr. C. W. Spencer; Mr. Sidney Marsland; Mr. A. T. Davies; Mr. F. C. Moscrop-Young; Mr. G. Stapley; Mr. R. B. Ling; Mr. G. Trotman; Mr. F. R. Catling; Mr. R. H. Boyd; Mr. T. J. Holland; Mr. J. R. Manning; The Rev. G. F. Burr, J.P., F.S.A., Scot (Halesowen); Mr. W. Fenn; Mr. W. W. Harrington; Mr. T. E. Lidiard James, F.R.I.B.A.; Mr. E. W. Harvey Piper; Mr. J. W. Rowley;

The Journal of The Society of Architects.

Conversazione and Opening of the New Premises.

Mr. L. C. Veale; Mr. J. Herbert Pearson; Mr. R. C. Davies; Mr. H. Y. Margary (Hon. Secretary Students' Section); Mr. W. C. D. Cruttenden (Birmingham); Mr. A. B. Hayward; Mr. C. L. R. Tudor; Mr. H. W. H. Palmer, F.R.I.B.A.; Mr. W. Dewes; Mr. Gincharde Todd, F.S.A., Scot.; Mr. F. F. M. Wilson; Mr. J. B. Merson; Mr. E. Dunch; Mr. A. B. Houchin; Mr. C. W. English; Mr. J. T. Westbye; Mr. H. Slicer; Mr. G. E. Dickens-Lewis (Local Hon. Secretary, Aberystwith).

Many members who were unable to be present wrote expressing their regret and wishing the Society continued success.

The visitors included Mr. Leonard Stokes, F.R.I.B.A. (the President of the R.I.B.A.); Mr. A. W. S. Cross, M.A., F.R.I.B.A., and Mr. George Hubbard, F.R.I.B.A., F.S.A. (Vice-Presidents, R.I.B.A.); Mr. Ian MacAlister (Secretary of the R.I.B.A.); Mr. D. G. Driver, F.C.I.S. (Secretary of the A.A.); Mr. George Perry; Mr. Richard B. Pilcher, F.C.I.S.; Mr. W. S. Frith; Mr. J. Jellis; Mr. J. P. Jones; Mr. S. Bylander; Mr. W. Gordon Young, and others.

On the walls of the various rooms were hung the prize designs and measured drawings and sketches executed during the last few years in competition for the Travelling Studentships and Scholarships of the Society, by Messrs. W. B. Walton (Blackpool); D. W. Coombs (Bournemouth); C. H. Hudson; J. T. Westbye; G. Llewellyn Evans; H. Fletcher Trew (Gloucester); F. M. Maddox (Shrewsbury); and J. R. Leathart. Examples of the work done in the Correspondence Classes were also exhibited, as well as photographs of English, French, and Belgian Cathedrals, Churches, and other buildings taken by Mr. Ellis Marsland and Mr. George Trotman.

During the evening some excellent songs were given in the reception rooms by Miss Dorothy Eales, Miss Hilda Campbell, Mr. Reginald Groome, and Mr. Harry Jackson; Mr. J. W. Ivimy, acting as accompanist.

The Yeadon and Guiseley Secondary School Buildings are situated near the main road between Leeds and Guiseley. They are constructed according to most modern principles to provide accommodation for 200 pupils, and include assembly hall, library, seven lofty and well-lighted class rooms, laboratories, art rooms, domestic subjects rooms, dining room, manual instruction room, gymnasium and swimming bath. The buildings have been erected from the designs of the architect, Mr. Wm. Broadbent, F.S.I., at a cost of £9,000.

The new Hallcroft Council Schools, built by the Ilkeston Education Committee, were opened recently. The two blocks of schools are of the pavilion type. The two central classrooms are so arranged that by throwing back a screen practically the whole of the advantages of the central hall in the old type of school is obtained. Each school consists of six classrooms, and accommodation is provided for 680 children. Connecting the pavilions are corridors opening on both sides into verandahs. The buildings are lighted by electricity, and the total cost is just under £10 10s. per head of the accommodation. The architect was Mr. H. T. Sudbury.

Proceedings.

HE First Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, November 17th, 1910, at 8.0 p.m.

The President, Mr. Geo, E. Bond, I.P., having taken the Chair, the minutes of the previous meeting were read, confirmed, and signed.

Eleven nominations for membership and two for studentship were announced.

The ballot was then taken, and the following candidates were declared to be duly elected :-

As Members:

ALLERTON. ERNEST CHARLES, BOLTON. ALBERT. BLANSHARD-BOLTON, CHARLES WILLIE, Butters. John,
Davis. Harold Stratton,
Dewes. Walter, FREYBERG. HERBERT, F.S.I., GARNHAM. ERNEST WALTER, GEAKE. HERBERT, HOMEWOOD. REGINALD WILLIAM, HOUFTON. PERCY BOND, JENKINS. JAMES THOMAS, KOHLER. HANS., LONGLEY. HENRY BANKS, MARK. OLIVER HALLE, MARK. OLIVER HALLE,
MCKILLIAM. JAMES NEILSON KIRKWOOD,
MONSBOURGH. ALAN GORDON,
29, Norfolk Street, Sunderland.
83, St. Paul's Churchyard, E.C.
Sauer Buildings, Johannesburg. PAGE. BERNARD CULMER. PARKINS. WALTER WILLIAM, PROCTER. EDWARD, STEVENSON. SIDNEY ROBERTS. SYKES. RICHARD GEORGE, SPENCER. CHARLES WALTER, SPRATT. NORMAN CROSBY, WILLS. JOHN ROSS,

162, London Road North, Lowestoft. 161, Main Street, Bingley, Yorks. 32, Craven Street, Strand, W.C. Sz, Claven Street, Strain, W.C.
Castle Square, Ludlow, Shropshire.
Holy Trinity Parsonage, Elmbridge Rd., Gloucester.
4, Bloomsbury Place, W.C.
24, Cromwell Place, S.W. 33, Bickerton Road, Highgate, N. 314, Ditchling Road, Brighton. 84, Poole Road, Bournemouth. Furnival Chambers, Chesterfield. Glan-Nant, Porth, Glamorgan. 8, Ingham Road, West Hampstead. Quinta, College Road, Epsom. 9, Denman Street, London Bridge, S.E. King Williams Town, South Africa. 83, St. Paul's Churchyard, E.C. Queen's Chambers, King Street, Nottingham. 24, Fenwick Street, Liverpool.28, Belsize Road, South Hampstead, N.W. P.O. Box 7, Pietermaritzburg, Natal. 136, Whitaker Road, Derby.

As Students:-

EVANS, DAVID, CROSSLEY. HARRY BOARDMAN, GITTINS. WILLIAM ALBERT, MARSHALL. SYDNEY JAMES, STEWART. ALEXANDER DAVIDSON, WILLIAMS. PETER JONES, Upper Main, Meifod, Welshpool. 3, Marlboro' Terrace, Bingley, Yorks. Mount Street, Welshpool. 56, Elmbourne Road, Upper Tooting, S.W. 9, Summerside Street, Leith, N.B. "The Grove," Victoria Avenue, Prestatyn, Flints.

Presentation of Prizes.

The President then presented the Travelling Studentship and Architectural Scholarship Prizes to Mr. D. W. Coombs (Bournemouth), and Mr. J. R. Leathart (London), respectively, the former receiving a cheque for £10, the balance of the award, and the Silver Medal of the Society, and the latter a number of books.

Letters of apology were received from Messrs. F. P. Taylor (London), H. Phayre (Shrewsbury), and J. Slater (Blackburn), who were unable to attend to receive their prizes for work done in connection with the Correspondence Classes. The President intimated that the prizes would be forwarded to them.

MR. GEO. E. BOND, J.P., then read his Presidential Address.

MR. H. GUICHARDE TODD, F.S.A., Scot. (London), in proposing a vote of thanks to the President, said that the satisfactory progress of the Society was shown by the report of the Auditors as well as by the excellent address of their President. The reception the previous evening had been a great success, and their thanks were due to the President for his hospitality. It was also very largely due to Mr. Bond that the Society had justified its position as an independent body, and he anticipated another successful year under his leadership. In the matter of Registration, the President had given a strong lead, and it was curious that the small number of gentlemen in the Institute who had so strongly opposed Registration were those who had the safeguarding of their art, viz., the R.A. circle, and the Royal Institute were producing at the present time two policies which he thought were very illogical. Their Registration Bill was a half-hearted measure, and he thought the Society would soon be able to take up a strong position as regards the future of their art. A great deal had been said about a National style of architecture, and under Registration when to be a member of the profession would indicate at least some training in art, the progress of architecture would be very apparent.

Mr. C. L. R. Tudor (London), in seconding the vote of thanks, said the address was exhaustive and comprehensive and showed the Society's great progress. He congratulated the President on entering his third year of office in New Premises which would no doubt add considerably to the usefulness of the Society, both professionally and socially. Registration was a question the importance of which they could not over estimate, and architecture would never take the position it ought, and must take with the general public until Registration had been accomplished. He could only express his regret at the attitude of another body on the question. It was incomprehensible to him that with all the advantages which that body had they did not take the very first steps towards Registration. The Society discharged a most useful function in promoting unity, a quality very much wanting in the profession, and he hoped every opportunity would be taken to widely increase the membership and to make known to that large number of practitioners who were not at present members of any architectural society, the advantages the good fellowship and strength of combination which membership entailed.

Mr. E. J. Sadgrove, f.r.i.b.a. (Hon. Treasurer), in supporting the vote of thanks, said the President's address was most inspiring, and would appeal to the Officers and Council, the general body of members and architects who were not members of either of the recognized architectural bodies, to support Registration. He hoped

the response would be a great one, and that a large influx of members would be the result. His views on the eligibility of candidates for membership in the Society had always been consistent with the Society's Registration Bill. The President had reminded them that many candidates for membership in the Society were not successful, and he thought there were many architects who would make application for membership if they were reasonably sure of being elected, but who did not care to risk rejection. A Registration Bill on the lines proposed by the Institute had no more chance of becoming an Act of Parliament than he had of becoming Prime Minister. The Institute's scheme did not touch the root of the evil, and until it did, the Society could not conscientiously support it, and if the Society's Bill was sound in principle what was the use of putting forward something manifestly inferior. He thought it would be a somewhat difficult matter to set up (as had been hinted) an effective Parliamentary opposition to the Society's Bill. The Society of Architects had promoted the interests of Registration for over a quarter of a century, and knew exactly what was wanted in an Architects' Registration Bill, and whatever honour and glory there might be in promoting such a Bill, belonged to them. Their object, however, was not self-glorification, but the benefit of the profession and the community at large.

They were prepared to efface themselves so long as they got what they had been for so long standing out for,—Registration of the whole profession, but they were asked to at once efface themselves and sacrifice their position as members of the Society by joining an inferior class of membership in the Institute, and automatically signing allegiance to something which was at present only a shadow, and in which they would have no votes. That was not a proposition they could recommend to their members. Nothing less than a Registration Bill on the lines referred to would satisfy them, and they would agitate until they got it. He asked all unattached bona-fide architects to support The Society of Architects by joining its ranks, as the larger the membership the stronger would be their voice. The Registration Bill was being actively promoted by the Society, and should the provinces be visited by emissaries from the Institute with the suggestion that architects have only a limited time to choose between becoming Licentiates and total extinction, they should remember that this is merely part of the tactics against Registration as the Society understands it, and he ventured to predict that the only effect of such action would be to augment the ranks of that body which would protect the vested interests of all bona-fide architects in the United Kingdom, viz., The Society of Architects.

Referring to the new Premises, Mr. Sadgrove expressed the hope that the members would feel that they were welcome whenever they were able to come. There would be no cliques dwelling in a self-created superior atmosphere, and they would meet among the members, men who were just as able as could be found

elsewhere. The Council were desirous of exercising their utmost endeavours for the material advancement of the Society, and there were several matters in hand at the moment of great importance all leading to this end. The policy of the Council was a forward one, but they must have material support, and as the members had appointed him Honorary Treasurer, he hoped they would show their appreciation of whatever services he had been able to render to the Society, by providing it with those funds without which the work could not be carried on. He hoped for a hearty response to the appeal which had been sent out by the President. Mr. Bond was commencing his third year as President, which showed the affection and esteem in which he was held by the Society. He was a man of sound common sense, and possessed of those valuable assets, ability to decide with accuracy and impartial justice the questions which came before him. He therefore might be safely relied upon to uphold the cause of the Registration of Architects.

MR. Ellis Marsland (Past Honorary Secretary), supported the vote of thanks, and said he thought the Society was fortunate in securing the services of Mr. Bond as President for another year. In taking office there were several things to be considered, among them being the question of one's own time, the interests of the Society, and the financial aspect, and their hearty thanks were due to the President for undertaking the duties for a third year. They had that evening been treated to plain speaking on the question of Registration. No harm could possibly be done by placing their position in as clear and true a light as possible, and it was necessary at that time to speak as their President had done, and plainly state their position so as to prevent any misunderstanding. The President in his excellent address had clearly stated the views of the Society, and he was convinced it would do a vast amount of good.

Mr. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), agreed with Mr. Marsland that the time had arrived for plain speaking, and for stating exactly what it was they wanted. He congratulated the President upon the greatly improved attitude of friendliness which existed between the Institute and the Society as compared with that which existed when Mr. Bond first took office. It seemed to him a wonderful thing, looking back over more than twenty years, that the President of the Royal Institute should have visited them in an official capacity, meeting their President on equal terms and speaking plainly to one another. Plain speech at this period both publicly and privately between the leaders of the profession would do more to bring forth a sound Registration Bill with which everyone would agree than anything which had yet been done. They could trust their President to put forward, not merely the views of the Society, but those of the great majority of the profession.

Col. F. S. Leslie, R.E., then put the vote of thanks to the meeting, and it was carried unanimously.

MR. GEO. E. BOND, J.P., in reply, said he was pleased to find that they agreed with his remarks on Registration. He believed that the Institute's Bill as outlined to them could not possibly have any good effect and would at the end of a generation leave them worse off than they were at present. He hoped that architects would studiously avoid strengthening the ranks of the Institute by becoming Licentiates; and that they would put before their practising brethren in their districts the reasons why they should support an universal Bill. Under a Registration Bill such as the Society proposed, no new additions would be made to the Register, except such as were properly trained and qualified. The men who at present combined a number of callings would not register their names under a universal system of registration. In his own district quite one-third of the smaller work was done by draughtsmen and writers in H.M. Dockvard, and he was convinced that if everyone were compelled to register before being allowed to practise, not one of those gentlemen would attempt to designate himself as an architect. He believed that if the President of the Royal Institute were to give a strong lead by saying that he would advocate and support universal registration, he would, with the exception perhaps of some two dozen, obtain the full support of the Institute as well as of all outside architects, and he thought it was time that the little coterie of artists, if they were not proud to be architects and simply desired to remain artists should stand aside and form a little society of their own and leave it to practical men who considered architecture to be a profession as well as an art, to manage their own work in their own way.

Mr. Ellis Marsland (Hon. Auditor), in moving the adoption of the Auditor's Report and Balance Sheet, said the general expenses were rather more than last year, but they included moving into new Premises and Housekeeping. The postage and printing showed a considerable reduction.

Investments had depreciated and the investment reserve of last year is wiped out. Bad debts were less and also the expenses of the Studentship, the *Journal*, and the Scholarship. The *Year Book* was slightly more owing to increase in bulk. New expenses were interest on Bank loan, addresses to the King, depreciation of investments and rates and taxes, but as no rent is payable for the new premises until 1912, the Society will benefit next year.

The net result was a surplus of £224 as against £261 last year, the difference being more than accounted for by the new items referred to.

The revenue from subscriptions continues to rise. The fees from new members are less, but the abandonment of the May meeting, owing to the death of the King, caused a financial loss to the Society, in that the nomination of members had to stand over. The revenue from advertisements in the Society's publications shows an increase on the Year Book, and a slight decrease on the Journal, but the cost of these two publications which used to run into hundreds of pounds per annum, is reduced this year to a nominal figure.

The Society of Architects' Revenue Account and Balance Sheet for the Year ended 31st October, 1910.

REVENUE ACCOUNT.

	€.	s. d.	£.	S.	a.	ę s. a.	£,
To	Expenses-		~			By Subscriptions—	
	House & General Expenses 158	15 5				Members 1490 9 0	
	Legal Expenses 7	7 6				New Members 88 4 0	
	Postages 91	0 5					1710
	Printing and Stationery 109						
	Rent, Rates and Taxes 237					Entrance Fees	90
	0.1	12 9				Examination Fees	48
			1257	0	9	CORRESPONDENCE CLASSES	25
	Commission 133	0 11	1201	U	44	"Interest on Investments	31
	T		22	8	4	JOURNAL-	OI
22					6	Advertisements and Sales	421
12			84	8			461
32			13	8	3	., YEAR BOOK—	155
22			38	2	11	Advertisements and Sales	155
2.2	TRAVELLING STUDENTSHIP		25	0	0	" DONATIONS TO LIBRARY	7
2.2		4	528	17	3	" Annual Dinner	66
22	"YEAR BOOK PRINTING, &c." .		106	6	2		
1.0	CORRESPONDENCE CLASSES		63	0	0		
22	, Prize		6	6	0		
	DONATION TO ARCHITECTS' BENEVO	LENT					
"	Farm		5	5	0		
	AMOUNT WRITTEN OFF LIBRARY .		15	13	6		
37	A Course in Course		10	0	0		
73	Carrage Agencies Decisions		31	3	9		
,,	A		95	2	10		
			11	6	0		
	INTEREST ON LOAN		TT	0	U		

,, A ,, A ,, I	MOUNT WRITTEN OFF LIBRAR ARCHITECTURAL SCHOLARSHIP SOUTH AFRICAN BRANCH ANNUAL DINNER EXPENSES NIEREST ON LOAN ADDRESSES TO KING GURPLUS FOR YEAR	Y	15 10 31 95 11	6 3	0 9 10 0				
		;	£2556	4	3	£	2556	4	3
			BAI	A.	NCE	SHEET.			
	1	f. s. d.		s.		£ s. d.	£	3.	d.
To S	Sundry Creditors— Subscriptions paid in advance	21 10 6				By New Premises	1521	2	4
	Sundry Creditors	365 7 7	386	18	1	,, FURNITURE— Balance from last Account 63 8 6			
	LOAN FROM BANK	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1025	12	10	Additions during the Year 141 19 0			
,, S	Surplus—					Less Depreciation	191	19	3
	Plus Surplus from Revenue Account, 1910	1775 11 6 224 12 7	2000	4	1	,, Library— Balance from last Account 91 12 5 Additions during the Year 26 12 6			
						Less Depreciation	102	11	5
						,, SUNDRY DEBTORS— Members			
						Less Reserve for Bad Debts 602 10 9 93 14 4	508	16	5
						,, INVESTMENTS— ,, £568 18 8 METROPOLITAN CONSOLIDATED 2½% STOCK @ 76½ 435 4 8 ,, £750 0 0 CONSOLS @ 79¼ 594 7 6	1029	12	2
						,, Cash— Petty Cash 6 2 4 Union of London and Smiths Bank, Current Account 52 11 1	5.9	13	5
						Dana, Current Account 92 II I	00	10	0
			€3412	15	0		3412	15	.0

We have audited the above Balance Sheet with the books of the Society, and have obtained all the information and explanations we have required. In our opinion such Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Society's affairs according to the best of our information and the explanations given us and as shewn by the books of the Society.

140, LEADENHALL STREET, E.C. LONDON, November 10th, 1910.

ELLIS MARSLAND, Hon. Auditor. BOLTON, PITT & BREDEN, Auditors.

8 6 12

Turning to the Balance Sheet, sundry creditors is apparently considerably heavier than before, but the bulk of this is for materials, etc, supplied for the new premises.

The Bank loan is a new item, and the amount has since been reduced to £800. The total surplus of assets over liabilities stands at £2,000 after allowing for depreciation and contingencies of all kinds. On the other side of the Balance Sheet the new premises account stands at over £1,500, or £1,300, in excess of last year. These figures will be increased in course of time, and in the meantime show the amount expended on the building up-to-date, including the amount paid to the builder on account, the purchase of the late Mr. Neale's interest in the lease, and other items. The furniture has been considerably added to and the value of the Library is slightly increased.

Sundry debtors shows that there is less outstanding from members and advertisers, and slightly more from Students and sundries, which is satisfactory seeing that the membership and the number of advertisers is constantly increasing, and that the proportion of bad debts might be expected to increase also.

The figures were in the printer's hands after four days' work by the Auditors, which means that the books have been accurately kept, and he pointed out that the book-keeping work had enormously increased of late years, particularly since the Society took over the advertisement department of its publications.

The Auditors had not raised any questions and the credit for the book-keeping department rested entirely with the Assistant Secretary.

Col. F. S. Leslie (Hon. Secretary), seconded the adoption of the Report, and the President invited discussion.

No questions being raised, the President put the proposition to the meeting, which was carried unanimously.

Mr. GEORGE E. BOND, J.P.

OR the third consecutive year it has been the pleasure of the Council and members of The Society of Andria and responsible position of President, and I desire to express my sincere appreciation of the honour conferred upon me. I assure my fellow members that while conscious of the fact that I have hitherto been unable to realize my ideal with regard to the proper performance of the duties which devolve upon the holder of such an important office, yet I have done my best. What ability I have and such time as I have been able to command, have been freely and willingly devoted to work for the Society. The fact that I am certain to receive the assistance of an able and energetic Council and competent officers, encourages me to proceed, and to view the immediate future with some degree of confidence, trusting that my past experience in the Chair may have added somewhat to my competency, and that, working well and harmoniously together we may jointly be the means of very considerably widening the Society's sphere of influence, and of increasing its efficiency as a factor in promoting the best interests of an honourable profession.

THE PROGRESS OF THE SOCIETY.—It affords me a great deal of pleasure to again be able to congratulate the members upon the continued success of the Society. The record of the past year shows a steady rate of progress, for forty-three Members, two Hon. Members, and forty-five Students have been elected since our last Annual Meeting, and but for the extreme care exercised by the Practice Committee in examining into the credentials and professional qualifications of candidates, the list of ordinary members would have been increased by a much larger percentage. The additions of the names of Sir Edward Brabrook, President of the Society of Antiquaries, and of Sir William Van Hulsteyn, M.L.A., of Johannesburg, to our list of Hon. Members, will I am sure be a source of gratification to all members.

In further considering the Annual Report one is constrained to refer to the irreparable loss sustained by the Society in the death of our capable and highly esteemed Past-President, Mr. Robert Walker, of Cork. Joining the Society in 1886, he at once took an intense interest in its welfare, and was a member of the original Sub-Committee entrusted with the drafting of the Registration Bill, in which task his services were invaluable. From then up to the time of his death, he remained one of its strongest and most consistent advocates, sparing neither time nor trouble in promulgating its principles and directing the attention of the members of the profession generally to the necessity for its universal adoption.

In 1906, he attended the Seventh International Congress of Architects held in London, and there read a valuable paper on the subject, his clear and cogent arguments and close reasoning (which were highly appreciated by the cosmopolitan audience) being the main factors which led to a practically unanimous vote in favour of the Registration Policy, and this in a very unfavourable atmosphere and amidst antagonistic surroundings. Mr. Walker was without exception the most eloquent speaker the Society has had among it many Presidents, as all will acknowledge who have had the pleasure of observing the masterly manner in which he conducted the proceedings, when in the Chair at our Meetings and Annual Dinners. This interest in the Society generally and in the success of its propaganda never flagged, for within a few months of his death I had a very interesting letter from him with regard to our work, and we shall all agree that by his death we lost one of our most valuable members.

The Society has suffered another severe loss in the death of Mr. Mallett, a Past Member of the Council, and one of the Examiners.

Of both these gentlemen, I can speak after a personal acquaintance of more than twenty years. Of the merits of the other members whose deaths it has been our sad duty to record, I cannot speak from personal knowledge.

While speaking of the Society's losses, I am bound to refer to the retirement from office of Mr. Ellis Marsland, Hon. Secretary, who with Mr. Mallett was a founder of the Society, and whose valuable work in connection with its progress has been the subject of many previous eulogies. With regard to his services in the promotion of Registration, my remarks made with reference to the late Mr. Robert Walker, are equally applicable to Mr. Marsland, but in his case we have reason to hope that after an interval of well earned rest, he will again place his valuable services at the disposal of the Society, in fact I may tell you he is no v assisting us in revising the Registration Bill.

STUDENTS' SECTION.—In the Students' Section we can record another year of success. The drawings submitted in the various competitions were exhibited and attracted a great amount of attention, firstly in London and afterwards in Cardiff, Devonport, and Wolverhampton. Such exhibitions must necessarily tend to promote an intelligent public interest in architecture, as well as to advance the interests of the Society, by showing the artistic and practical quality of the work performed by the Students.

Papers, Etc.—The Members of the Society may again be congratulated upon having had an opportunity of listening to many addresses and papers on artistic and practical subjects, dealt with in each case by an expert. It is a great source of regret to me that more members do not attend these meetings and take an intelligent part in the discussions which follow, but I believe this is accounted for by the facts that

the vast majority of members reside at too great a distance to attend except at great inconvenience, and that they are able, in our *Journal*, to read and study at their leisure the illustrated reports of the addresses, or papers, and the subsequent discussions. I hope, however, that as a result of the better facilities afforded for social intercourse in our new premises, larger numbers will attend the Ordinary Meetings.

The New Premises.—You have all had an opportunity of viewing our new premises, and it must be a source of great gratification to every member to know that after twenty-six years we are able to meet in a self contained home of our own; one conveniently situated for those who arrive either by railway, tube or bus, and one providing every accommodation necessary to meet our present needs and to provide for further extension to meet all reasonable requirements in the future. I hope that the necessity for further extension will not be long delayed, for such a home as we possess must prove attractive, particularly to architects practicing in greater London who will appreciate the advantage of central premises giving them practically all the advantages of a professional club, where they may meet clients or friends, obtain tea and light refreshments in comfort and comparative seclusion, and have access to the Library, and the professional papers and magazines.

It is obvious that any large addition to this class of local members will create a demand for a larger Assembly Hall, and to provide the necessary funds for its erection and for the costs of the alterations already made, I have invited financial assistance from all those members who have the welfare and prosperity of the Society at heart, and who desire to see it take that position in the professional world to which it is entitled as a reward for its energy and persistent efforts to secure for all bona-fide architects the privileges of practicing their honourable calling in a manner compatable with the inherent instinct of gentlemen, freed from the materialistic influences of debasing competition with those untrained and unqualified persons who are now forcing many men with small opportunities, to descend in self-defence into the arena and fight them with their own weapons.

REGISTRATION.—Such a statement of claim on behalf of the Society brings us face to face with a problem which must be solved in the immediate future. A new situation has arisen with regard to Registration, and, although it may appear incredible, it has been seriously suggested that in the name of unity, the Society ought to cease its existence as a distinct organization, and this at a time when its position is stronger than at any previous moment in its history, when it is increasing its Membership more rapidly than ever before (some thirty names have been added to the list this evening), and when it has added enormously to its responsibilities by the acquisition of new Premises; and that after twenty-six years of strenuous propagandist work in favour of Registration we should hand over the fruits of our labours to a

body which has always opposed our efforts and which I submit, quite unjustifiably claims the right to dominate the interests of the profession generally.

And what is to be our reward? It is suggested that we shall forfeit our present position as corporate members of an important, influential, and constantly growing Society, sink our individual self-respect, and voluntarily degrade ourselves by entering the ranks of another body, through the only door which its unwisdom has left open, that is to say as members of an inferior grade, paying a smaller subscription than its other members, and in the management of which body we shall have neither voice nor vote. We are invited to do this solely in order that the profession may appear to speak with a unanimous voice in asking Parliament to pass a half-hearted Registration Bill, a Bill which in my opinion will add to, rather than decrease the difficulties of our practice; for upon all questions of professional etiquette and recommendations and advice with regard to professional practice and every other point, except Registration, the Society has always supported the Royal Institute to the utmost of its power and will continue to do so, proving that unity of action can be attained without fusion.

THE SOCIETY'S INFLUENCE.—My present intention is to justify, if that be necessary, our existence as a distinct organization, and I say without hesitation that in the past the Society's influence has been considerable in moulding the thoughts and guiding professional policy both in this and other countries. Twenty-six years ago the Society was founded for the purpose of endeavouring to remedy the evils and check the growth of abuses, which the apathy of those, whose duty it was to perform this work had allowed to accumulate, and grow. We may safely assume that had the parent Institution been animated at that time by the life and spirit of its later years, had it shown any inclination to adopt a progressive attitude or to seriously consider the demands of the profession generally, that action should be at once taken to check the growth of those abuses which were gradually sapping its life's blood, then there would not have been any "Society of Architects" to-day. But where the leaders hold haughtily aloof, neglect the interests, desires, and it may even be the prejudices of their humbler brethren, then loyalty is strained, nay, it even languishes and dies; for the spirit of loyalty depends upon personal esteem, affection and respect.

The Present Situation.—To arrive at a correct understanding of the situation as it existed when the Society was founded, and which continues to-day, we must first recognize the facts that the maintainance and advancement of the higher interests of architecture as an art, and the initiation and development of a policy governing professional practice, are distinct problems. Secondly, we must recognize that the work included within the legitimate practice of an architect covers an exceedingly wide field, and that as a consequence, the qualifications required for the satisfactory performance of the various duties involved are equally wide in their scope.

At one end of the scale we have men of undoubted talent and ability, many of whom are able to specialize in works of a more or less monumental character. Some commenced their career with every possible advantage, and after a University education, entered offices full of the best work; while others with influential or wealthy connections have been able at one step to reach the same high plane, a plane upon which their future labours may be carried on entirely free from the strain of dishonourable and crafty competition. These men of great opportunities should be the makers of the architecture of to-day, to this class we look for artistic guidance, they are qualified for research work and with their many advantages should with pencil and pen assist their humbler brethren to reach a higher level in art than would be the case without their assistance; their duty and pleasure should be to advance architecture as an art, and for this work they are fitted.

But the advantages they have enjoyed and the special talents which qualify them for this work, are the main causes of their inability to understand and appreciate at their proper value, the difficulties of their less fortunate brethren: for at the other end of the scale we find equally earnest and conscientious men, most of whom entered the profession in possession of the same lofty ideals, and animated by the same high aims as their leaders; but with fewer advantages, and perhaps less ability, and being at the same time less fortunate in their environment, they are glad to eke out a scanty living by performing work, which would be scorned by the aristocracy of the profession, but which nevertheless has to be performed.

Between these extremes we have the large body of general practitioners, the backbone of the profession, whose opportunities are being curtailed every day. Works which should be distributed over a county are centralized in an office under a public official, and for what is left they have to compete with the unqualified and sometimes dishonourable practitioner.

Our great art leaders were not, nor are they now, competent to deal with this great question of professional policy, it was beneath their consideration a quarter of a century ago, and their ideas are still the same. We have all along wished to relieve them of this obnoxious duty, but they are neither willing to perform it themselves or allow it to be performed by those who as a result of practical experience are better qualified to do so.

Some Obstructions to Progress.—The greatest obstruction in the way of progress, however, is the selfish individualism of the successful architect.

It has required a quarter of a century of propagandist work to even partially break it down, and as each man naturally desires to reach the highest possible level of success, it inevitably follows that within their special spheres every man is his brother practitioner's competitor. What is one man's gain is considered a loss by the other, there is apparently no community of interests, and their local relationships

have, at best, been but a condition of armed neutrality. To the working of the individualistic spirit may be attributed the fact that practically one-third of the practitioners in the United Kingdom are not attached to any professional organization, and further we may safely assume that of those who are members of one body or another, not more than thirty per cent are actuated by any sincere desire to promote the interests of their respective associations, they neither trouble themselves to vote for the election of Officers or Council, nor in some instances do they loyally fall in with recommendations of the Council to abstain from competing under unfair conditions, but they pay their annual subscriptions solely for the purpose of being able to afix some proportion of the alphabet to their names, and to increase their apparent importance in the eyes of an indiscriminating public.

It was very necessary to teach architects that such conditions are deplorable, and that under them the general well-being of the profession is being steadily undermined; that abuses of all kinds are growing practically unchecked, that competition drawings are invited and freely submitted subject to unfair conditions, and that two-thirds of the less important works throughout the country are being carried out by other than recognized architects, to the detriment of both architects and clients, all because members of the profession have not seen fit to combine for the protection of their general interests.

Everything therefore which tends to unite members of our profession by the bonds of social intercourse, common aims and sympathy, must necessarily be of immense value in promoting the ultimate benefit of architects and of architecture.

The Society's Policy.—The policy of The Society of Architects is founded on this basis, and I venture to say that architecture and incidentally the best interests of the profession, have been generally promoted in direct proportion to the growth and success of the Society. It has had a quickening influence, and has been the indirect means of putting energy into others, and awakening their executives to a fuller appreciation of the needs and desires of their members. That the Society was not formed in any captious spirit of opposition is proved by the fact that its Council at once set its mind to an earnest consideration of these evils, the nature of which had been freely ventilated without securing attention elsewhere, and the immediate result of its deliberations was, that it determined to promote a scheme of compulsory training and Registration to be applied to the whole profession, as the only practical and effective remedy for the deplorable conditions complained of.

With this aim in view it called for and received the willing aid of experts both within and without the profession to advise and assist in the drafting of a Bill to be presented to Parliament, one of these gentlemen being His Honour Judge Emden, whose work on Building Contracts, Leases and Statutes, is a recognized standard work, and who was inferentially well acquainted with the legal obligations of architects and the difficulties of their position,

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The President's Address.

AN ACTIVE PROPAGANDA.—The Bill was drafted and presented with the results which are known to you, and, although it has been persistently opposed by the Royal Institute upon every possible occasion, still I venture to say that not one practical argument against its principles has been adduced. All adverse comments have been more or less of a sentimental character. In the face of this opposition your Council has steadily persevered, fully determined to secure the ultimate success of its great object. Sparing neither time nor money, members of the Council and Honorary Officials have at their own cost visited various centres of influence where they have delivered lectures, initiated discussions, and by every reasonable means endeavoured to teach the true nature of the proposition, and the great advantages the profession as a whole would reap, as a result of successful passage of the Bill through Parliament. They inculcated a spirit of brotherhood and unity, pointing out that is the duty of every architect to support financially, and by voice and pen, a movement designed to free the building, public and also themselves from the evil results of incompetence and dishonourable practices; and we must acknowledge that they were eminently successful in their efforts; for we now know through the kind offices of The Builder, that a vast majority of the practicing architects in the United Kingdom is in favour of Registration.

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In addition to the Registration Bill, the Society actively supports all movements calculated to improve the architectural character of our Streets, Squares, and Public Buildings, and to preserve our Ancient Monuments, its advice is sought and freely given upon matters affecting the rights, privileges and duties, involved in architectural practice, and its Executive has at all times honestly and conscientiously endeavoured to fulfil the duties it owes to the members, and to the profession generally.

I venture, therefore, to assert that The Society of Architects has fully justified its existence, and that it thoroughly deserves the continued support of all those who desire the success of the Registration movement. I can assure you that the Society is fully determined to persevere in its efforts to pass its Bill through Parliament, and is at the present time engaged in the work of revising the Bill with a view to bringing it up to date. At the same time, it is perfectly willing to discuss both the theoretical and practical nature of the proposition with other interested parties; our desire is for a sound Registration Bill, no matter by whom it may be promoted, but the central principle which we *cannot* agree to alter is that it must be compulsory and universal in its application.

OTHER REGISTRATION BILLS.—With regard to the suggestion for a Bill to be promoted elsewhere, let us for a moment consider what would be its probable results to our practice.

The chief object of a Registration Bill from our point of view is to ensure that in the future no person shall be allowed to perform for payment any of the duties involved in the recognized practice of architecture unless such person has been adequately trained and has proved his qualification to perform these duties by passing the Statutory Examination.

It is fully recognized by all parties that such an ideal cannot at once be achieved; there must be a transition stage, for if there is one thing certain in practical politics, it is that under any Bill likely to be approved by Parliament, the vested interests of all persons describing themselves as architects and practicing as such will be protected whether or not they practice architecture in combination with some other calling, or are qualified according to the prescribed standard. All that we hope to secure in the immediate future, is that those conditions which foster the unqualified practitioner shall cease immediately the Bill is passed, leaving those at present practising to be gradually eliminated by natural causes.

Is the alternative Bill calculated to secure this object? As a result of prolonged consideration of the proposal as informally explained to us, I am fully satisfied that it will not. I have not seen a draft of the Bill, but judging from the writings and speeches of its promoters its chief purpose is to secure for the executive of the Royal Institute, complete and permanent control over the interests of the profession as a whole. The Bill is being promoted by those who have for sentimental reasons alone, consistently opposed Statutory Registration for a quarter of a century, they have objected to a scheme under which the names of some unqualified persons might appear in the same Registration list as their own (which by the way they do now in most professional directories), and I venture to say that with a few distinguished exceptions, these gentlemen are still equally determined to maintain their attitude on this point; they will not have universal Registration; and it is only because the progressive forces within their ranks have made their voices heard that they even contemplate what is after all but a compromise with regard to the movement. That such is the case, their course of action during the past two years abundantly proves. The central point in the suggested Bill, is Registration within the ranks of the Royal Institute, but they recognize that in order to secure the passage of such a Bill it must be backed by the unanimous voice of the profession, and an appeal has been made to the profession that it should become united under the banner of the Institute.

Now desiring unity in such a cause, one would have expected to find the leaders prepared to make some small sacrifice in order to secure it; but such a thing never occurred to them. I have the greatest possible respect and admiration for many of these gentlemen individually, but I am bound to say that collectively they appear to be obsessed by such an exaggerated sense of their own superiority that they are unable to understand the elementary fact, that there are outside the ranks of the Institute, many fully qualified men, who value their honor and self respect as highly as any of those within.

The President's Address

The Licentiate Scheme.—The initial step taken in the movement designed, as they say, to secure unity, was to amend (?) the charter in such a manner as to close their ranks to the honourable admission of even the most eminent and qualified practitioners who were not then members: and this at a time when less that half the practising architects in the United Kingdom were included within them, and as an act of grace they offered instead, cheap admission to an inferior grade which had it been taken advantage of, would have had the effect of branding many fully qualified men of long and honourable standing, as being inferior to their assistants, and further, there was an implied threat, that all those who did not apply within one year for admission as Licentiates were to be left outside the recognized ranks of the profession and subsequently treated as a negligible quantity, without standing and unworthy of further notice.

This is an absurd proposition, for while it is quite possible that a law may be passed compelling all present practitioners to register themselves as architects and to provide that all future candidates for admission to the Register shall pass a qualifying examination, no sensible man can believe that it is possible to compel any person by statute to join any particular Institution under a penalty for non-compliance, of losing his professional status.

It is suggested that if all qualified men now join the Institute, the building public in future will only recognize as architects those within its ranks, but speaking as a result of long experience, I venture to say a large section of that public, cares nothing about diplomas, but will in the future as in the past get the work done in the cheapest possible market, with the same deplorable results, both in the quality of the work and to the interests of bona-fide architects: and as it is the avowed purpose of the promoters of that Bill, to register only within the ranks of the Institute, and only such persons as can prove their present qualifications, it necessarily follows that such registration can only be voluntary, and that there would still remain outside its jurisdiction a large class of unqualified nondescripts, many of whom simply perform architectural work as a means of adding to the incomes they derive from their more legitimate callings, and most of whom, would never attempt to register under a compulsory Bill.

This very class, however, is the chief source of our present difficulties, whose ultimate extinction Statutory Registration is intended to secure, and any Bill under which it is to be allowed to develope in the future, at its own sweet will, would be simply a repetition of the great mistake made by the Dentists in 1878, a mistake they are now straining every nerve to rectify; a task rendered doubly difficult by the large vested interests which have since been acquired by a similar class to that which we wish to eliminate from our ranks. A class which I venture to say cannot be touched under any Bill which deals exclusively with the interests of a particular Institution.

THE POSITION OF THE INSTITUTE.—In summing up the position, I would say while such a Bill might add to the importance of the Institute, it would be utterly futile from our point of view; it would not remedy the evils complained of by the general practitioners, nor would it check their further growth; were it now passed a large number of our brethren accepting the shadow for the substance, lulled by a false sense of security, and trusting to the statement made by one of its strongest supporters, that an upward advance would begin at once; would again go to sleep and a generation hence the profession would wake up to the fact that instead of the ranks being cleared of the undesirable and unqualified, (as they would have been under a compulsory and universal Bill), this class had largely increased both in numbers and variety, that new vested interests had been created and the difficulty connected with their ultimate suppression increased ten-fold. Our successors would then have just cause to lament the fact that in the year 1910, there could not be found within the ranks of the Institute, a man of strong personality to champion the cause of the thousands by leading an attack upon the untenable position then held by a small oligarchy of great artists, who formed the only obstruction standing in the way of universal registration.

A Bill no matter by whom it may be promoted, has not the slightest chance of success in Parliament if opposed by any considerable section of the profession, and I believe that the vast majority of our brethren, both within and without the Institute's ranks, are in agreement with us as to the necessity for universal compulsory Registration. I venture, therefore, once more to invite our leaders in the profession to reconsider the situation; I suggest to them that their exalted position calls them to higher duties than those involved in the mere administration of routine Registration work, for which they are totally unsuited by tradition, natural instinct, education, and the lack of experience of the difficulties surrounding the practice of their humbler brethren. I ask them to consider whether the Royal Institute will be able to maintain its present position as a Court of Honour, should it be hampered by the duties connected with the administration of a Registration Act. Could it penalize members for the infraction of various articles of its code of professional honour? for instance, a member might persistently violate such a code and still keep within the letter of the Common Law, could it exclude such member when the exclusion from the organization would carry with it the further penalty of the loss of his right to practice? would not the general tendency be to lower the present standard of professional morality and honor as between professional men, down to such a standard as could be maintained in a Court of Law? Is it worth while for the Royal Institute to run this great risk simply for the purpose of arrogating to itself a duty for which it has neither the aptitude or taste. Far better will it be to leave the entire administration of any Registration Act in the hands of a Central Council elected and appointed for the purpose.

The President's Address.

The Position of the Society.—We look to the leaders in the Institute to maintain the honour and integrity of the profession generally, and to advance its best interests, to exercise their great talents in spreading culture and in endeavouring to develope in us all a more perfect sense of artistic proportion, which will the better enable us to appreciate the truthful, beautiful and powerful in good work. We expect them to maintain the dignity and high importance of the Institute as a centre from which may radiate those good and useful influences which lead to the organizations of congresses, conferences and gatherings called together for promoting the art and science of building, and ask that it shall progress and develope along the lines it has laid down during the quarter of a century of its renewed activity. In all these things The Society of Architects is prepared to follow its lead and actively co-operate with it where necessary, and I look forward, hoping that in the immediate future, the only jarring note between us, viz., that of Registration, will be struck out and that with perfect unity in our aims and objects we may work together harmoniously in promoting the best interests of architecture and architects.

We cannot tell what the next few months may bring forth, but if agreement cannot be secured, I know we can look forward with confidence to the loyal support of our members; it is too late in the day for the wishes and desires of the Society, with its large membership, to be ignored, and I invite those who are not members of any association and who are in possession of the necessary qualifications, to join the Society, and support us in our efforts to obtain a cessation of the conditions favouring the growth of the unqualified element in our ranks, and thus assist us in maintaining our position in the work which lies before us.

Art qua Art.

There are, it appears, says The British Architect, two distinct classes of architects, and there may very well be two distinct sorts of architectural societies, says the President of The Society of Architects. We imagine the best of the younger men in the profession will hardly agree with the President that the "men of great opportunities"—fortunate in birth, position, education, or chance—should be the makers of the architecture of to-day, and that they are specially fitted to advance architecture as an art. Is this really so? Have fine opportunities done so much for art? Has University training largely quickened the life of art? This appears to us a dangerous standpoint to take. Briefly, Mr. Bond suggests that the prominent and fortunate men of the profession, and those who may be defined as leaders of the artistic side of our work, may be relegated to a distinct class, and that such a class may be very well represented by the Royal Institute of British Architects, whilst there may be another class of a more practical sort who may find their representation in The Society of Architects. He says:—"Our great art leaders were not, nor are they now, competent to deal with a great question of professional policy" (such as Registration). And he strikes a blow at the selfish individualism of the successful architect, which we doubt not is very well deserved.

Is it not good news to hear that "practically one-third of the practitioners in the United Kingdom are not attached to any professional organization," and of those who are, not more than 30 per cent. are actuated by any sincere desire to promote the interests of their respective associations? This appears to afford some hope that trade unionism has not got such a mighty hold upon architects after all. We should advise our readers to follow carefully Mr. Bond's address, for they will find in it what is the direction in which the profession is drifting. It seems that the real object of the profession, the production of fine architecture, is being left in the background, whilst the protection of its pecuniary rewards is being made the chief object of consideration.

The Society of Architects has no intention of being wiped out of existence, especially when its own definite policy of Registration is for the time being submerged in the development of R.I.B.A. membership. The plain object of The Society of Architects is to secure that "no person shall be allowed to perform for payment any of the duties involved in the recognized practice of architecture unless such person has been adequately trained and has proved his qualification to perform those duties by passing the statutory examination." If a drastic tyranny like this is to be exercised, how many members of The Society of Architects, or any other body, could pass a test in the art of architecture? The art of architecture, for the promotion of which we exist, is not to be confounded with that of the building

surveyor, and does any one imagine there would be five hundred architects in the United Kingdom who could pass any reasonable test in the art of architecture? But we quite admit there are many more than that who are conscientious building surveyors with yearnings for art, who call themselves architects.

The hopefulness of the present situation, which has been well defined by Mr. Bond, is that those who follow the art of architecture may come to see more definitely where they stand, and will insist on such a severe statutory examination before allowing a man to call himself an artist, that we may be able to wipe out a large proportion of the existing architects in this country! All such movements as that on which The Society of Architects bases its chief claims to existence are, we sincerely believe, against the best interests of art.

By all means let us protect the public from bad plumbing and from bad building of all sorts, but do not let us pretend that we can protect them from bad art. The very worst way to protect them from that is to bring art to the test of the examiner's desk.

Architects and the R.I.B.A.

The Secretary of The Society of Architects in a letter published in the professional Journals, points out the essential difference between the Registration proposals of the R.I.B.A. and the Society, and suggests that architects who become Licentiates of the R.I.B.A. on Registration grounds are going to unnecessary trouble and expense. The Southern Builder commenting on this, says: "Mr. Butler, Secretary of The Society of Architects, whose letter we print in another column, makes the statement that the R.I.B.A. propose only to recognize in their Bill for Registration such architects as are members of the Institute. It is difficult to realize that such a statement can be correct, as it seems hardly possible that any body of sensible men could dream for a moment that any Bill would be passed which did not include every practising architect, whether belonging to any recognized society or not. Apart from the opposition of The Society of Architects, and without counting those architects whose qualifications simply consist of their experience, such a Bill is bound to be opposed by the Surveyors' Institution, as there are a very large number of practising architects who write F.S.I. after their names. In fact, so many style themselves 'architects and surveyors' that it seems probable that surveyors would have to be permitted as architects, just as surgeons practise medicine, though not qualified as physicians."

Copyright in Architecture.

The Case for the Architect.

Mr. Charles Tennyson in his article in the Contemporary Review says: "It is worth while to consider whether architecture differs in any and, if so, in what degree from the other fine arts. That it is one of the most important and influential of the sisterhood can hardly be gainsaid. Indeed, Vitruvius went so far as to maintain that it expresses exactly the same ideas as music through a different medium, and used even to ascertain many of his proportions by a method of musical calculation. Sculpture, which is already protected by a statute of 1814, presents even closer analogies. The architect works from a design, as the sculptor from a clay model; both artists employ comparatively unskilled hands to do their rough work, though, of course, the actual share of the sculptor in the manual work of his art is much greater than that of the architect. Both use costly materials, upon the excellence of which a good deal depends. . . . It seems, therefore, that there can be no reason in principle against the proposed extension of protection to architecture. Now let us turn to the practical side. This depends on two questions. Firstly, has the architect a grievance? Secondly, if he has, is it possible and, if possible, advisable, to remedy it?... Does the piracy actually take place? That it does is common knowledge to all interested in the profession, and a list of instances will be found at pp. 174 and 175 of the evidence before Lord Gorell's Committee of 1909, which can. it is submitted, be regarded in no other light. Actual copying of a building can take place in one of three ways. The pirate may get possession of the original design and build from it. He may be enabled to do this by the fact of his being the commissioner of the building, who, it has been decided (see Gibbon v. Pease, 1905, 1 K. B., p. 810, and Ebdy v. M'Gowan, the Times, November 17th, 1870), is entitled, in the absence of agreement to the contrary, to the plans; or he may have seen the plans at another person's house, at the office of some council, or reproduced in a newspaper. As long as the building is not copyright there is nothing to prevent him building an exact imitation from the plan, for the building is evidently not a 'copy' of the plan in the eye of English Law. True, the architect of the second building might possibly make himself liable for infringement of the plan if he had it copied and copies circulated among employees for the purpose of the second building; but even this might profit the original architect little, for if he had parted with his drawings to the commissioner of the building, the copyright in them (they being still unpublished) might be held to have passed with the transfer.

"The second way in which copying may take place is by the pirate, with or without permission from the owner of the building, making measurements of it. Or, finally, he may, at any rate in the case of a simple external effect, be able to produce his copy by memorizing or photographing the original building. . . .

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Copyright in Architecture.

"It seems, then, that works of architecture often are in fact copied, and from this copying the architect may suffer damage in two ways. He may be deprived of work which he would otherwise have had, as where a builder, having a stretch of seaside property, commissions an architect to design a villa for it, and then himself builds from the designs of the first villa nine more to complete the row; or he may be injured in reputation by having his original design travestied by inferior imitation in unsuitable positions or materials.

"It follows that one must answer the first question propounded above in the affirmative. The architect has a grievance. It remains to consider whether it is possible or advisable to remedy this grievance; and here it must be observed that architects have to face the hostile view of Mr. Justice Scrutton, who appended to his signature of the Report of Lord Gorell's Committee a reservation to the effect that he was unable to concur in the proposed inclusion of architecture among the protected arts, his reasons being the difficulties which he foresaw in the trial of what are new and original features of houses and in the remedies for infringement. Two other Members of the Committee shared this view, which was the one expressed by the Committee of 1878. The second of Mr. Justice Scrutton's objections seems met by Sect. 7 of the new Bill. As to the first, that copyright in architecture can be protected seems demonstrated by the cases that have occurred in foreign countries. Five of these are cited in the appendix to the evidence taken before Lord Gorell's Commission (pp. 176-178 and 258 and 259). In four of them the architect succeeded. In two of these instances the case seems to have turned on a direct copying of plans; in another the copy was executed from measurements of a monument in a public cemetery; in the fourth case a Belgian architect (could he do so under the new Bill?) restrained a newspaper from publishing his design; while in the fifth the architect failed, being unable to prove that the work possessed any originality."

The City Development Plan.

Mr. Raymond Unwin, F.R.I.B.A. (Member), in his paper read before the Town Planning Conference in October, points out that the City Plan is needed to organize the proper utilization of all the areas within its boundaries and that by the organization also of educational centres, the proper provision for recreation in the distribution of parks and open spaces, the layout and control of residential areas, the greatest impetus may be given to the development of a healthy and intelligent race of citizens.

The first step is to determine the general lines on which the City should be encouraged to develop; which areas should be reserved for industrial purposes, and which should be devoted to residences of various classes. It is bad to allow large areas to be covered by houses of exactly one size, occupied by people of one class only, and while it would be foolish to attempt to intermix different-sized houses indiscriminately, it is possible, and desirable that areas for different-sized houses should be arranged, as much as possible, in connection with every residential district.

In considering the general form which it is desirable that town development should take, two extremes may be mentioned. Either the town may extend in solid continuous rings, or it may increase by the growth of numerous detached townlets spreading from some centre, such as an existing village or a railway station, on the outskirts of the town.

The Garden City Method.

Mr. Ebenezer Howard has advocated the limitation of the size of towns and the location of all further population, beyond the limits fixed, in garden cities, dotted about at some distance from the central town. A great part of the increase of all large towns takes place on these lines, and we only fail to recognize to what extent because each new townlet, spreading in all directions, so soon is merged in the parent city. By reserving an unbuilt-on zone round each of these townlets the garden city method of development would be largely attained. But, depending only on the power of voluntary purchase, the promoters have very restricted choice as to locality. But the essential idea that after a certain size the development of a city should be by the formation of supplementary centres on the outskirts, and the recognition of the importance of securing that the indefinite expansion of these and the central town into closely built up areas should be checked, and that defining belts of park, woodland, or open country should be reserved, seems to me of the utmost importance. Many continental towns, when abandoning lines of fortification, have been wise enough to reserve such a belt.

If towns of great size are to be wholesome dwelling places, it seems necessary to adopt one of two courses. Either we must give to every house a considerable extent

of ground, which means spreading the town over an excessively large area, increasing unduly the distances which have to be travelled and creating the maximum difficulty in supplying and maintaining all the various services and conveniences of communal life, or we must develop on the principle of grouping our buildings together in certain parts and leaving adequate open spaces around each group. This seems to me both the right and natural course. It is rendered easy by modern means of transit. It renders easier and less costly the distribution of water, light, heat, telephone, and other conveniences, and at the same time fosters a much more interesting and varied character of development. City life is essentially co-operative in character, and I do not think that the ideal of city life will be the setting of every individual house within its own quarter-acre plot of garden, but rather the placing of groups of houses within their own hundred acres of park.

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The influence of roads on Town Planning.

Having determined, roughly, the character of the different areas around our town, and also the character of development which we should attempt, and the areas which should, as far as possible, be reserved for public open spaces and pleasuregrounds, the next step in preparing the city development plan will be to consider the highways required for convenient intercommunication between all these centres and the heart of the town itself or its industrial district, and also between these different centres themselves. Where a town has reached a certain size, generally speaking, the main flow and return of population will be inwards towards, and outwards from, the centre. If, however, the town has clearly marked industrial regions at any considerable distance from the centre, new directions will be given to this flow, particularly as affecting those areas occupied by the industrial classes, and, in addition to main roads leading out from the centre of the town in all directions, others should be planned giving direct access to great centres of employment, business centres, railway stations, and other similar places. These roads, with the intercommunicating roads connecting the different districts one with the other, will form the main framework of the town extension plan. In addition to the radiating roads, certain cross diagonals will be required, and roads roughly following circular lines round the town will also probably be found necessary. The real economy of any town plan will greatly depend on the proper arrangement of its main highways-on the right spacing and the sufficient grading in width and character of all the roads. Here we must take warning from mistakes which have been made in other countries in the matter of planning, where extravagance in the size and number of roads has sometimes so enhanced the cost of development, and therefore the price of the land, that it has become impossible to build dwellings except in the form of five-story blocks of flats. We shall have to break away entirely from our own traditions in the matter of road-making.

A departure from tradition.

Hitherto it has been the general custom in this country for our bye-laws to fix one minimum width applicable to all new roads, and there has been a tendency on the part of the more enlightened municipalities in recent years to increase this minimum width from about 36 feet up to about 50 feet. But, while either of these widths is ridiculously inadequate for the main thoroughfares in any large town, the greater of them at least is so excessive as a means of giving access to a group of houses that already the cost of these wider roads has become one of the causes tending to produce either the overcrowding of houses on the site or the creation of flat dwellings. If we are to carry out sensible town planning, we must accept the principle that roads should be of varying widths according to the purpose they are to fulfil. Certain roads can be so planned that they will meet all the requirements of the more important thoroughfares, and the intercommunicating ways of secondary importance also. The city development plan should, in fact, lay down all these primary and secondary highways. If the city plan provides for these secondary roads at distances from each other of from half to a quarter of a mile it will generally be found that all necessary provision for convenient intercommunication will have been made. Any other roads required to develop the land for building purposes should be regarded as building roads only and should be of an entirely different character. Also, the planning of them may often tend with advantage rather to discourage any through traffic from making use of them. If this is done, such roads may be much narrower in total width, provided that a reasonable distance between the buildings is prescribed. The construction of them may be lighter also; pitching, paving, kerbing, channelling may be dispensed with altogether or in part; and, indeed, on many of the smaller and shorter roads it is difficult to see why a simple carriage-drive, such as is found adequate to give access to a large palace, public school, or other such building containing a very considerable population and entailing much vehicular traffic, should not quite well suffice as a means of access to limited groups of houses or cottages. The larger business buildings will naturally follow the lines of the main roads, while the more simple dwellings, will naturally be located on the minor roads. Many of our main country highways have only a width of 16 feet macadamised, and they carry conveniently an amount of traffic often ten times as great as that which would be carried by these minor drives. But when the width of the drive is less than 24 feet, turning places must be considered for motor-cars and vans. I think, on the whole, it is more convenient to have the drive a little narrower -say 13 feet-and provide fairly frequent turning places where the width is increased to 25 feet. It is probably wise in such roads to leave some margin for possible extension, and the total width devoted to the roadway should perhaps be 20 feet for the smaller roads, and from 24 to 36 feet for the more important of these minor roads.

The building line and street pictures.

While it is necessary for the health and comfort of the residents to fix a minimum general width between the houses on such roads, which should not be less than 50 or 60 feet, from an architectural point of view it is most desirable that the regulations securing this should be so formed as to allow buildings here and there to be brought nearer together than the general building line, to enable some framing or closing of the street view to be secured, and thus prevent the indefinite prolongation of rows of houses too far apart in proportion to their height to produce good street pictures. This may be considered by borough officials to be a small matter, but so long as the length of these projecting buildings is limited, as, for example, that it shall not exceed twice the width of the space between them, and also the frequency limited, as, for example, that the distance between such projections shall be in no case less than 150 feet, or something of that sort, the effect on the question of air space and air circulation would be nil. Surely it should be one of the great advantages obtainable from a more generous supply of air space that a certain relaxation in the arbitrary character which has had to be adopted in many bye-laws could safely be allowed. This was done in the case of corner buildings in the Hampstead Garden Suburb. where, instead of the minimum area of open space required at the back of the corner building of 150 square feet by the ordinary bye-law, the Suburb offered to provide 1,000 super feet of open space if they were left free to put it at one side instead of at the back. Architects generally will appreciate the importance of this more elastic treatment of such questions. At Hampstead this one concession enabled us to complete both the external and internal angles of groups of buildings, and yet provide vastly more open space attached to each house than the bye-laws required. A properly finished carriage-drive, with a grass margin, even if provided with a simple kerb edging, including sewers and surface-water drains, will only cost from one-third to one-half as much as an ordinary 50 feet bye-law road such as is required in many districts. It is obvious that when attempting to reduce the number of houses built to the acre from forty to fifty to something between twelve and twenty that this reduction in the cost of building roads is a vital consideration. But it is a still more important one when at the same time it is desired to increase the width of the main highways from 50 feet to 60, 80, or 100, according to circumstances, and in a few cases to greater widths still where the amount of traffic justifies the dividing up of the road into different tracks, for high-speed and for local stopping traffic, with perhaps a wide grass margin to carry the tramway lines—an arrangement which reduces the cost of laying and greatly deadens the noise of the tramway, and converts these tracks from a nuisance into something of a street decoration. If at each side of these grass tracks trees are so planted as to mask the standards carrying the overhead wires, even this disfigurement of the street may be greatly minimized.

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The City Development Plan.

Between these two extremes that we have dwelt on—the 20 feet carriage drive and the 150 foot multiple-track highway—there will be room for roads of almost every width and the greatest variety of character and treatment.

The component parts of the design.

Having settled the purpose of different areas, determined the general character of growth and the approximate directions desirable for main and subsidiary highways. the town planner finds himself with the following component parts out of which to make his design—namely, the main centre-point or climax dominating the whole, the secondary centres in definite proportion and relation to it, and the main highways linking them up, the whole giving the bones or main framework of the design. Within the spaces defined by this framework, having special relation to the secondary centres and proportion to the primary highways, we have the network of secondary highways, while within the areas which these leave, for the purpose almost solely of giving access to the buildings, we have the minor roadways or drives, which should be in relation to any subsidiary centre-points both in relation and proportion to the framework of secondary highways. Finally, there are the buildings themselves, for the sake of which all the above exist, and upon the proper placing, aligning, and grouping of which the beauty of the completed effect will depend. This is at once the natural order arising out of the requirements of the problem of city development. and equally the natural lines on which to produce an orderly design. Many of the difficulties which have been found to exist in American cities seem to me to arise from neglect of this principle. The whole of the town being planned in relation to the smallest unit—the building block—it consists primarily of a mass of detail framework having no relation to anything but itself. The excessive inconvenience of the indefinite multiplication of small units of the building block is forcing the American cities to attempt the very difficult task of superimposing a framework upon this rigid mass of detail, a task not only enormously expensive, but, from the point of view of producing a successful artistic result, well-nigh hopeless; and looking at some, at any rate, of the plans which have been prepared for the further development of American cities, one is led to think that the fundamental wrongness of this type of plan has not yet been recognized, as apparently they are but reversing the order that has to be adopted in the town-improvement scheme, and are trying to superimpose on a framework of main highways another rigid framework of minor roads, which, though it may have some distant relation to the whole, bears no proper relation or proportion to the spaces resulting from the character of the main frames work. No system cuts up the land into more awkward corners, or more thoroughly destroys the street façades, than that which consists of a framework of diagonal highways laid upon a rigid gridiron system of minor roads, and from no system do such unsatisfactory road junctions result. In town planning it is essential to avoid being carried away by the mere pattern of lines on paper. Order, definiteness of

design, these must be; but there must first be grasped an understanding of the points where the order is important and will tell, and of those where it matters little. In considering, therefore, the framework, which in a modern town can seldom take any exact figure, it matters little whether the triangular spaces between the roads all match one another, but it matters greatly whether the roads meeting at the points of junction are so related to each other that the vista can, if desired, be closed by a well-placed building, or a place of successful shape be created. The importance of so designing the plan of a town that interesting and beautiful street pictures can be created as a result of it has been very fully recognized by the Germans in the strong reaction which has taken place in their cities against the geometrical style of town planning which they followed in the early years of the modern revival of the art. I think we may well bear in mind that size, by itself, is a somewhat unsatisfying quality, and in studying German work for the sake of good proportion between the detached parts, and the careful adjustment to the nature of the site and the fine appreciation of the possibility of beautiful grouping of buildings, we may well, by study of both Renaissance planning and French work, learn to appreciate the importance of maintaining certain broad lines of design and of giving to our town a definite and shapely framework—characteristics which are lacking in much German town planning, where the designer seems to have neglected the greater thing in undue concentration on the picturesque treatment of minor details.

In taking a general survey of town-planning work, one cannot but feel that the different schools of planners have been hampered by theories of formalism and informalism which have become prejudices without the real conditions of either being entirely grasped. I believe that it is only when we have got beyond these prejudices in favour of so-called formal and regular work, and feel free to make use of other forms, recognizing at once the naturalness of formality in design and the importance of sacrificing mere formality on paper, to seize upon the magnificent opportunities which many undulating sites afford for crowning the heights with clusters of buildings or emphasizing the lines of our river fronts with dignified façades.

The City of the Future—the Immediate Future in England.

It would be tempting, says Professor C. H. Reilly, M.A., F.R.I.B.A., in discussing the City of the Future to dream of the time when, in the perfect town organized for all human activities and pleasures, our art of architecture shall have found its final and noblest expression. For the town of the future, like the cathedral of the past, will be the handiwork of many artists inspired by one faith. I do not conceive it in its most perfect form as the work of one brain, however complete its government. And the faith that is required is the ardent desire to interpret in its highest terms the character of the civilization, the ideas and aspirations of the citizens. Our art at every epoch, from its limitations which are at the same time the sources of its strength, must always be a reflection, more or less complete, of the civilization of the moment. All that we as architects can do is to ensure that it reflects the best rather than the worst, the more refined rather than the more vulgar elements.

But, however tempting these visions of the distant future may be, to us, as practising architects, it is the city of the immediate future that is our concern, that is indeed our domain by right, as well as of necessity. I think in England, the thing, that really concerns us is the character of the growth during the next fifty years, and whether our art will be able to absorb that character and express it in beautiful forms.

The first step is to come to some clearer conception of the meaning of this new growth, of the people who will cause it, of the kind of life they will live, and of the hopes they will entertain or we may entertain on their behalf. We have all seen during the last thirty years the fruitlessness of trying to impose one alien set of ideas after another upon a new condition of living. We have all built, or most of us have, Queen Anne houses, Georgian houses, Cotswold farmhouses, or stone-slated Welsh cottages for the modern suburb, and if we have had the courage to admit it to ourselves we have found them not a little ridiculous when finished, furnished by Maple's, and inhabited by our stockbroker friends. The fault is the ancient one of putting new wine into old bottles. We pass through miles of recent suburbs, and beyond that they are garish in colour and irregular in outline if for the well-to-do or drab and monotonous if for the poor, it is impossible to say that they have any continuous inherent character; in short, that they exhibit any real sense of architectural style.

Now it is this sense of style, this consistent and truthful expression of character, which, in contrast, gives the charm and permanent value to the older parts of our towns. Where we have, as in York, narrow winding lanes, overhanging barge

The City of the Future.

boarded houses, we feel at once the character of the life of the Middle Ages—the close, intimate, neighbourly life crowded within the city walls.

Or take the stately squares of Bloomsbury and the West Central portion of London—the most liberal town planning yet achieved in England. We see that such a neighbourhood corresponds truthfully to an era of greater leisure, to a culture more reposeful and refined, to a time free from advertisement when it was thought right to restrain the expression of individual tastes and idiosyncrasies to the interiors rather than to the exteriors of the houses.

Still later districts in the despised plaster period, districts of formal villas set in what are now faded London gardens with their trellis arbours and verandahs, their cement vases and broken statues, represent an idea of refinement and detachment, something definite and consistent, which we can readily grasp and appreciate. Of course it is a much easier matter to focus the characteristics of a past period than of the one in which we are living or of those of the immediate future. We can realize now that the Bloomsbury squares, built for a few great landlords, were designed in accordance with their standard of culture—a culture at the back of which were centuries of class tradition. We can see that the haphazard muddled buildings of the late Victorian Period, the vast sporadic growths of no particular character which have surrounded our towns and villages, were the outcome of a new class of society with new needs attempting to accomplish its own desires. It was during this period that the great middle classes arose, as a result of the industrial expansion of the preceding fifty years.

Now I take it that the main difference between this period and the one on which we are just entering is that education has now had time to bring about, if not a better, at any rate a new standard of taste, and that the futility of disorganized individual effort has at last been clearly realized. In Germany, apart altogether from any questions of art, the value of organization in building development has been understood and practised for several decades. We are ourselves only just beginning to see that for the benevolent despotism of the great landlords, which till the middle of the nineteenth century was fairly successful, we must substitute an organized democracy if we are to have anything but chaos. The *laissez faire* period of town growth corresponding to the last half of the last century has proved its wastefulness as well as its hideousness; hence our town planning Bills and our co-operative suburbs. The note of the new period therefore is organization, the suppression of rampant individualism for certain general amenities.

If suppression of individual idiosyncrasies for the general good may be taken as the key-note of our new garden suburbs, and I think there is not much doubt about it, do the houses which are already being built in them properly express this idea? While admitting very readily that they are a long way ahead of the surrounding villadom, is it entirely appropriate that they should in the main be based upon the

early mediæval type of cottage, with high-pitched roof and gables, with wood mullion windows (stone being, I suppose, too expensive), rather than on the later Georgian types, with flatter roofs and sash windows, which are found so sedately set round many an English village green, and so largely contributing to its sober restful character? Our garden-suburb cottages are, especially at Hampstead, very good of their kind. The question to my mind is whether they, any more than our domestic architecture as a whole, are right in kind, whether they adequately express the best contemporary culture. And if they do not do this, how can they serve for any length of time the culture that is to come?

It is, therefore, worth while to consider shortly what we have been attempting to do of recent years in house building. Since the Gothic revival finally broke our classic tradition two main ideas seem to have inspired our house architects; one simple picturesqueness of outline derived from Gothic architecture, and the other, more difficult to define, might perhaps be termed an attempt to express domesticity. To further the supposed ideal of the home we have indulged in a rough and affected simplicity of finish, making use of such archaic things as solid oak steps in our staircases and bare bricks or tiles in our fireplaces. But our Gothic inheritance of picturesqueness has prevented our desire for simplicity from taking the form of simple rooms simply put together. It has instead tempted us to all sorts of angular shapes and bay windows, so that our rooms, if rustic in materials and workmanship, have no real simplicity of form. So far, therefore, this striving after simplicity, this exaltation of the primitive cottage, is an affectation.

If, then, the house of the future suburb is on the one hand to express something of the new submission of the individual to the community, and on the other hand to answer to a more exacting and refined, if less sentimental taste, it is obvious some new departure must be made. The question of evolving a new type of small house answering to these requirements is indeed the most pressing architectural problem in the city of the immediate future. The country house brought into the town is really as affected and stupid as the town house taken into the country. We want in our garden suburbs something between, expressing their peculiar character, a combination of the refinement of the town with the charm and quiet homeliness of the English country. If one may venture on a suggestion, we should here, as elsewhere, do well to pick up the threads dropped at the approach of the Gothic revival. I fancy in our desire for more reticent exteriors we should revert to flatter roofs with fewer gables, and seek our interest in such delicacies as trellis porches and verandahs, and windows carefully divided with thinner bars and marginal lights pointing to a higher standard of interior finish. Expression is most naturally given to such a house by a large swept-out cornice, adding interest and shadow to what otherwise might seem a bald reserve. Such a feature, if maintained at the same level, is sufficient in itself to give unity to a group of houses, and would express thereby the new communistic idea on which the suburb is based.

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If these ideas are right for the houses, they apply equally to the gardens. The dividing-line between what is for the enjoyment of all and what for the comfort of the individual will everywhere have to be redrawn, and I think it will at first show more obviously in the gardens than in the houses. Our garden suburbs already give up in many cases the little strips of front garden to communal ownership instead of allowing varying taste to spoil the composition of a whole road. I do not feel, however, that this principle can be applied successfully to all the land round the houses, except in the case where each house stands on a very minute plot. There is something private and retiring that is inherent in the idea of an English garden which, where anything approaching a garden at all is possible, cannot well be dispensed with. A garden which is common property, however well designed originally, is sure in time to lose its intimate and individual character, descending by easy stages to that lowest level, which we in England, not without humour, call a recreation ground.

I have dealt with the architectural character of the units which will compose the new suburbs because of their obvious importance to the city of the immediate future, and because now, with so many schemes in the air, it is the moment to pause and make sure whether our architectural ideas are adequate to our vast and new opportunities. It is our duty as architects to see that the æsthetic amenities—if one may use the phrase—in our new suburbs are at least on the level with those of hygiene, air, and rent, which are making so great a success of the new movement.

With regard to the central portion of the city of the immediate future, its administrative and business centres, it is probable that, like the businesses carried on there, these parts will tend in their architectural character to become more and more cosmopolitan. Already a block of offices, a large hotel or club, may be designed in Paris for London, or vice versa. Some of the most recent and best French and American architecture is to be seen in our own streets, which assimilate it easily and well. But this only means that each nation is seeking its inspirations at the same classic source. And if this applies to the buildings where local variations of detail are more likely to appear, it applies with redoubled force to any new planning or adjusting of old lines. Here the classic idea of balance and axial vistas, derived from the Roman fora and thermae, is universal. Paris may show the finest example of it, but for the monumental effects of the central portions of all towns it is the only formative idea. What picturesqueness there may be in these parts must be the natural picturesqueness inherent in the site, due to curving river, hill, or valley; anything else artifically produced in relation to stately buildings becomes an absurdity. The simple elements of such planning, converging lines to centres of interest, symmetrical places of simple rectangular, elliptical, or circular shape, quadrant roads, lend themselves with perfect ease to the maximum of convenience if the conditions of the problem have at the outset been thoroughly grasped. The simple

elements of classical planning enumerated above allow for all possible monumental effects, and in the future we may believe they will be increasingly employed.

With this taking place, and with the civil architecture of all towns becoming more cosmopolitan in character, we shall find the tendency to revert to bygone combinations of classic forms less and less frequent. To erect to-day a pure Georgian or Wren building in the central portion of a town is to affect an anachronism only less glaring than to put up a François Premier, Elizabethan, or Gothic building. As in the suburbs we have passed through the period of eclecticism and caprice, and are approaching one of greater restraint and refinement, so in the centre a further suppression of the individual taste for the good of the common whole is necessary. Where the government of the future city could aid the movement would be, so it seems to me, in a wiser and stronger control, not so much of design, for that is a shy thing, apt to wither under official restraints, but of such general things as bulk and colour, which more than anything else affect the massing and composition. Colour has a special importance, for if the buildings and streets in all big towns are approximating to a common ideal there must nevertheless always be a local and sympathetic colour arising from the nature of the site, of the atmosphere, and of the materials available. To introduce red bricks and tiles into an essentially grey town like Edinburgh, or into a white town like Paris, is to do an injury to the whole, which the town as a whole should resent. Against such intrusions, therefore, the town should protect itself. A further and similar function in the immediate future will be for the town to protect and cherish the architectural character of its different parts. To allow a garish terra-cotta structure of German design like the Russell Hotel to break into the quiet English dignity of Russell Square is evidence of inefficiency which we hope will be impossible in the better organized city of the future.

Finally, then, it follows that when the idea of the town, as an organized entity, at once the result of and the perfect means whereby the best energies of its citizens can do their appointed work, is realized, it will grow in the minds of all until it is conceived as the ultimate work of art, to the making of which, as architects, it is our high fortune to be called.

Some Factors in Town Planning.

The town planning scheme would appear, says Sir W. B. Richmond, to indicate a general opening out for the employment of many and various factors immediately connected with the arts of architecture, sculpture, and painting. But besides these, many branches of what are called the minor arts will necessarily in time come under consideration. Metal work (chiefly wrought iron), woodcarving, fencing, stucco work, and, as it seems to me, essentially also the laying out of formal gardens, arbor culture as well as floral.

We all know that structure grows, or should grow, out of the plan. The plan, therefore, is the dominant note of each chord in process of development.

Symmetry of plan may be *ad nauseam*. Unsymmetric arrangement employed with obvious self-consciousness may degenerate into affectation and mannerism. Effect is promoted by balance of symmetry and unsymmetric treatment.

Many geometrical forms, other than the circle, oblong, or square, may be used with advantage. The oval, ellipse, together with triangles of various qualities of proportion, discreetly used and varied in their application, will redeem a plan from obvious monotony, and produce unexpected effects of light and shade upon elevations. Thus a pleasant variety might be attained, difficult spaces dealt with, and undue formality avoided.

. In our climate, well-lighted colonnades, glass-covered areas—not necessarily narrow or restricted—would be most acceptable for winter plaisance and summer shade, whenever the latter may be essential in our fitful and rare summers.

In projected gardens—and I hope that all town planning schemes may make gardens an important element—places should be arranged for fountains, also for bandstands.

Not far off from the gardens covered spaces might be considered indispensable as forming retreats in bad weather.

Of course, places of public entertainment, gymnasiums, schools, and churches will have to be considered.

Smoke abatement.

Electric-lighting stations should be provided with smoke-consuming apparatus. Their shafts should be carried up to a height which will allow the unburnt particles to pass away readily under influence of air currents.

With a view to render the air as pure and immune from smoke as possible, all grates should consume as much of the smoke of private fires as possible, and every encouragement should be given to the manufacturers of smokeless coal. Indeed, it might be a part of the town planning enterprise to devise, especially for the

Some Factors in Town Planning.

dwelling-houses of the poorer classes, central heating stations from which necessary warmth might radiate.

Also the erection of cooking stations and cheap restaurants for the poorer classes, encouragement being given to them to club together, a system which would promote economy, healthy food, and good fellowship, so much needed among our poorer brethren.

If we cure the smoke evil, gardens on house-tops might be possible even in our climate. They are not so in America, where the climate is both hotter and colder than with us. It is the dirt produced by London smoke which makes these impossible at present.

In other conditions, which must come when the absolute necessity for a change from dirt to cleanliness is recognized, a whole row of houses of the poorer classes might possess a large area of flat roof—a healthy playground for children, and be a source of pleasure to "grown-ups." But while things are as they are, we are bound to insist upon open spaces within every area where new town planning is adopted—and these are almost of more imperative need to the poor than to the rich.

Co-operation of Architect, Sculptor and Painter.

I cannot but think that the architect—who is, or will be, of course, the prime director of all town planning—should consult the sculptor and painter.

Mural painting is pretty nearly certain to come into more general use when the smoke of our towns is abated. Sculpture, happily, is already inaugurated as in a measure an essential whenever a building is to be representative or illustrative of any noble purpose; yet not nearly enough is this the case, partly because the sculptor is not taken into the confidence of the architect *ab initio*. Wherever there is to be sculpture, the sculptor should be in consultation with the architect from the starting of any plan. The same law should apply when coloured decoration is in view. The painter should be in consultation with the architect from the earliest moment of plan-designing.

There will be one difficulty which, I take it, both the originators and the exploiters of town planning see they will have to face, namely, the dismissal of every chance for the jerry-builder and all the curses that he brings with him, and the various Building Associations which have done so much to spoil the appearance of towns, cities, and villages in England.

Registration and Town Planning.

None but accredited architects who have passed proper examinations which have fitted them to be designers and constructors, or constructors and designers, as I would rather put it, should, I think, be enlisted in the ranks of responsible guides for the town-planning scheme.

Care will also, I think, have to be taken in London to provide against the interference in matters of art and taste of the Office of Works. We have only to remember how disastrous the control of that body has been and is.

To relieve us from that body—if it be possible to do so—when the town-planning committees are established and strong-going, they should be represented by their own Member of Parliament, whose duty it should be to instruct "the House" and the Office of Works in matters which touch either on convenience or æsthetic laws. The former may be superficially understood; the latter are almost as little comprehended as they are cared for.

I venture to hold the opinion that the scheme under consideration is a gigantic and splendid one, and as such is full of pitfalls which will have to be bridged over or destroyed before the plan is erected and becomes a strong, powerful, commanding edifice.

Its success depends, in my opinion, on two things, the first being that none but responsible architects, engineers, and builders shall have anything to do with a final judgment; second, that upon the governing committee the presence of some of the leading sculptors and painters of the day should be obligatory.

If the plan goes on, if it be exempted from the middleman as much as possible, if the ruling powers of the committee elect as far as possible to employ young men who have received diplomas from various—to be specified—authorities, it appears to me that the town-planning scheme will give intelligent labour to a class of students trained by the State, who, under the supervision of older and more experienced men, would be encouraged to work out their own ideas. If this can only be brought about, success, I think, may be confidently looked for.

Mainly about Members.

MR. RAYMOND UNWIN has been elected a Fellow of the R.I.B.A. in recognition of his services in connection with the recent Town Planning Conference.

In Solly Street, Sheffield, a Roman Catholic Club is in course of erection from plans by Mr. Fred Scatchard, of Station Road, Castleford.

One of the gentlemen recently appointed a King's Counsel on the recommendation of the Lord Chancellor is Mr. A. A. Hudson (Hon. Member), President of the Tribunal of Appeal.

MR. HENRY BUSHELL, F.S.I., of 33, New Bridge Street, E.C., has been appointed Quantity Surveyor to Margate Corporation for their new Winter Garden and Pavilion Scheme at the Fort, Cliftonville, costing about £30,000.

MR. ALBERT E. PRIDMORE (Past President), has been unanimously elected Renter Warden of the Worshipful Company of Painters, Churchwarden of St. Botoph, Bishopsgate, and a Governor of the Bishopsgate Foundation.

On a site in Mare Street, Hackney, new Headquarters for the Women's Social Work in connection with the Salvation Army have been built. Mr. A. Gordon is the architect of the building, which will provide thirty-three distinct sets of offices on four floors.

The new Aber Infants' School provides accommodation for 200 scholars, is planned on the corridor system, and, owing to the steep nature of the site, has two floors. The school was designed by Mr. Pugh-Jones, f.s.i., County Architect, Cardiff, under whose supervision the works have been executed at a cost of £3,185.

New Council Schools have been opened at Torpoint. The Schools have been erected on a pleasant site overlooking the Hamoaze, and will accommodate 192 boys, 192 girls, and 180 infants, a total of 564. The old school provided for 540 scholars. The cost of the new buildings, including the land, is about £6,000. The architect is Mr. B. C. Andrew, of St. Austell.

His Holiness Pope Pius X. has conferred the Decoration of Knight Commandership of the Order of St. Gregory the Great on Mr. James F. McMullen, J.P., who has been a Member of The Society of Architects since 1887, and also a Member of the Registration Committee. Mr. McMullen has occupied recently the position of City High Sheriff of Cork, and is a Justice of the Peace for the City and County.

A central site has been secured in Oxford Street, Mountain Ash, for the purpose of erecting a Cinematograph Theatre. The plans have been prepared by Mr. George Kenshole, Architect, Bargoed. The Theatre will provide accommodation for over 1,000 people. The syndicate is opening the new Picture Palace at Bargoed. This building will accommodate 700 persons. These plans were also prepared by Mr. George Kenshole.

The Journal of The Society of Architects.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the Journal as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the Journal known as a useful medium between the producer and the consumer.

Papers for Session 1910-11.

The following arrangements have been made for the Session.

November 17th. Presidential Address. By Mr. Geo. E. Bond, J.P.

December 15th. A Great London Improvement. By Mr. G. A. T. Middleton, A.R.I.B.A. (Past Vice-President).

1911

January 12th. Subject to be announced.

The Turned Lattice Work of Egypt. By Col. F. S. Leslie, R.E. (Hon. Sec.) February 9th.

The Relation of Sculpture and Carved Ornament to Architecture. March 9th. By Mr. W. S. Frith.

English Furniture. By Mr. Percy Macquoid, R.I.

April 6th. Hospitals. By Mr. A. Saxon Snell, F.R.I.B.A. May 11th.

Ordinary Meeting.

The second Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday December 15th, 1910, at 8 p.m.

Agenda:

- 1. The President to take the chair.
- 2. Minutes of the last Ordinary Meeting
- 3. Nominations for Membership.
- 4. Announcements.
- 5. Ballot for candidates for Membership and Studentship.
- Paper on "A Great London Improvement Scheme." By Mr. G. A. T. Middleton, A.R.I.B.A. (Past Vice-President).

Light refreshments will be served after the meeting.

THE

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OF

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JANUARY, 1911.

[New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Licentiates R.I.B.A. The Provincial Propaganda.

In a communication to *The Builder*, Mr. Ellis Marsland, Past Hon. Secretary, S.A., says: "Will you kindly allow me a little space to correct an impression Mr. Hubbard's letter might convey, and which I feel sure he would be as glad as I am to have corrected?

It would appear from his letter that the tour he has just completed with so much success was the first of its kind undertaken, and revealed a very unsatisfactory state of things unknown before. The Society of Architects, in 1896, started a crusade which was identical with the tour just concluded by Messrs. Hubbard and Cross, and discovered then what has since been rediscovered by them.

Our first meeting was at Bristol in 1896, followed by others at Cardiff, Newcastle, Leeds, Sheffield, Birmingham, Exeter, Glasgow, Edinburgh, and other towns.

Our method was to send an invitation by letter to all the architects within a certain radius of the town we selected for the meeting. At the meeting a discussion on the Registration question was held, grievances were ventilated, and a resolution in favour of Registration passed with, in some cases, dissentients, mostly members of the Institute.

But since our crusade, and as the result of our spade work, times have changed, and the Institute has now reaped the reward of our labours, at which we are extremely delighted, but I think some credit should be awarded to us for our pioneer work."

BARKER, THOMAS CHRISTOPHER,

COOPER, LAUNCELOT ARKWRIGHT,

COOK, SAMUEL NATHANIEL.

HOBSON, FREDERICK JAMES,

JORY, EDWIN BRINDLEY,

MEWTON, JOHN RICHARD,

REYNOLDS. FRANK STEPHEN,

TANNER. DOUGLAS GEORGE,

COOPER, DOUGLAS WILLIAM,

FIRTH, JAMES ERNEST,

CROMIE, ROBERT,

KING, WILLIAM,

PENDLETON, BASIL,

Proceedings.

THE Second Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, December 15th, 1910, at 8.0 p.m.

THE PRESIDENT, MR. GEO. E. BOND, J.P., having taken the Chair, the minutes of the previous meeting, as printed in the *Journal*, were taken as read, and were confirmed and signed.

One nomination for Honorary Membership, eight for Membership, and four for Studentship were announced.

The ballot was then taken and the following Candidates were declared to be duly elected:

As Members:-

York Chambers, Westborough, Scarborough.

33, Newhall Street, Birmingham.

7, Drayton Gardens, West Ealing, W.

3, Cavendish Road, Clapham, S.W.

19. King Street, Rawtenstall.

35, Conway Road, Cardiff.

1, Beach Road, Hartford, Northwich.

56. Hamilton Square, Birkenhead.

16. Brazennose Street, Manchester.

3, New Street, Birmingham.

la. Compton Street, Eastbourne.

As Students:-

227, Clifton Road, Rugby. 24. York Avenue, Lincoln.

MR. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), then read a paper on "A Great London Improvement Scheme," illustrating his remarks by means of diagrams.

THE PRESIDENT in inviting discussion upon Mr. Middleton's paper, said that it had afforded them a great deal of interest. The scheme, he thought, was a stupendous one, involving engineering rather than architectural problems, and as there were a number of gentlemen present who were experts in such matters he would be pleased to hear their views on the proposals before them.

MR. HERBERT FREYBERG, F.S.I. (Member), in proposing a vote of thanks to Mr. Middleton, said that one of the complaints put forward at the recent Town Planning Conference was that the schemes hitherto carried out had not been sufficiently comprehensive, but he thought they would all agree that that could not be said of Mr. Middleton's idea, which would, if completed, benefit the whole of

Central and South London. Mr. Burns had alluded to the railway bridges in his speech at the Guildhall, and he was certainly not complimentary to the æsthetic culture of the people who designed them. Another evesore was the bridge which crossed Ludgate Hill, in front of St. Paul's, with what seemed to him in this case a sacrilegious use of the City of London's motto, "Domine Dirige Nos," on the front of it, obstructing as it did the view of one of the most perfect pieces of Renaissance architecture in existence. He was a little disappointed when the lecturer suggested using that bridge, as he had hoped that he would have invited everybody to do their utmost to destroy it. If anyone had tried to observe St. Paul's from Ludgate Circus, he must agree that that bridge ought to come away, and no matter how much they wished to advance traffic they must see that St. Paul's, the centre of Wren's replanning scheme, was done justice to. He agreed with Mr. Middleton in his remarks about the decorative work of the bridges, and suggested that it might be carried out on the lines of those delightful specimens of engineering combined with architectural effect to be found in the Rialto at Venice, the Ponte Vecchio at Florence, and lastly that most satisfactory specimen of such kind of work, viz., the Pulteney Bridge at Bath. If some treatment of that character could be carried out on the bridges under Mr. Middleton's scheme, he thought that architects might have something to do as well as civil engineers. He had much pleasure in proposing that a cordial vote of thanks be accorded to Mr. Middleton for his highly instructive, intelligent, and very much condensed paper.

MR. JOHN TODD (Member), said it afforded him great pleasure to second the vote of thanks. The boldness of conception displayed in the scheme was enough to take one's breath away. He, however, regretted that he could not regard it with much favour, as the great need of communication in London was direct North and South, and direct East and West, and he failed to see that the new road would prove of such benefit as perhaps might appear at first sight. To bring a mass of traffic immediately to the East of the Mansion House would be, he thought, deplorable; the streets there, as it was, were nearly impassable about eleven o'clock, and he felt sure that if the proposed new road were to be made, a further vast street widening would necessarily be entailed both at the Mansion House and Charing Cross. At the latter place it would also be deplorable to land a huge volume of traffic into the Strand, unless the widening was continued. The cost, too, he thought, would prove absolutely prohibitive; it might be that in the course of years a profit would be made, but he ventured to think that no railway company or combination of railway companies, neither the London County Council nor the City Corporation would be willing to pledge their credit to the extent which would be necessary to carry the scheme to fruition. When they reflected that a comparative short street—the new Kingsway—cost some six millions, and paralyzed the London County Council's further efforts for years, it

would be of interest to have some estimate of the cost of Mr. Middleton's improvement scheme. There was a vital need of a very small widening in the City of London at the eastern end of Leadenhall Street, where the East and West traffic had to pass through a "bottle-necked" thoroughfare; it was, he believed, only some 17 feet wide at the present moment, but in spite of that vital need the authorities found it practically impossible to obtain the money in order to carry it out. The value of property in the City was so great that it was found practically impossible to widen even that little bit, to say nothing of the demolition of the bridges and the hotels suggested by Mr. Middleton. He would like to ask what would be the views of the lecturer in regard to the removal of the arches, and instead of indulging in the lofty scheme of one High level roadway and two Low level roadways, content themselves with the more modest scheme of removing the present railway arches and build one roadway to pick up the arteries leading from North to South. He felt, that although London certainly needed better street accommodation, and improved facilities for its vast traffic, there was another need which Londoners felt probably far more than anything else, and that was a rest from taxation. He was strongly of opinion that in spite of the need for greater traffic facilities, London would be better served if the authorities would hold their hands for a few years, allow trade to recover and infuse a little more confidence in the building world. If such a scheme as that proposed were to be seriously taken in hand he felt that the work of London would be to a very great extent imperilled for many years to come, although, he did not doubt that ultimately a profit would be made. He suggested as an alternative that London would find benefit in removing certain Building Act restrictions from the City, which after all was still a mediæval city in the conformation and narrowness of its streets, and had problems peculiar to itself. He thought also that benefit would be obtained if higher buildings (skyscrapers) were allowed in the City, increasing the limit of 80 feet to 250 feet subject to handsome contributions from the owners of land who would benefit by such legislation, and use the money thus obtained in widening the North and South approaches to the City. The vast interests at present in existence would not then be imperilled as he feared they would be by the slums of Southwark being converted into a rival of the City of London,

MR. ARTHUR HARRISON, M.INST.C.E. (Borough Engineer, Southwark), said that he rather agreed with the last speaker, in that they could not get a great London improvement, such as was proposed, without cost to the ratepayers; if they could they would of course much desire it. This scheme would provide a large number of business premises easily accessible to the City and Westminster, but he did not think it would provide any easier communication between the North and South. On the plan, Mr. Middleton showed several roads leading from High level roadway to the roads of South London which were in his opinion not long enough considering the differences in level, and therefore, not of an easy gradient. The one

starting from near Southwark Street, he had checked with the plan, and he found that it would give them a gradient of something like 1 in 25, and as Southwark Bridge at the present time was not used because it was approached by an incline of 1 in 27, the proposed new road would not prove of much serious use as a relief of London Bridge. He took it that the scheme, however, was not a matured one and was capable of further development, but he did not think that it would anything like answer the purpose which the new St. Paul's Bridge would, in addition to the alteration to Southwark Bridge which was part of the City of London's scheme. One point in particular had occurred to him during the reading of the paper, and it was that the new roadway would be some twenty or twenty-five feet above the level of the other roads, and consequently the business premises built on the high level road would be about twenty-five feet above those on the lower level, and he thought the architectural effect of the difference in height would be very bad. It would also have a tendency to make everything on the high road grand and the remainder of the district mean. He considered a bad point in the scheme was the proposal to introduce another main road by the side of the Mansion House. There were already six streets leading to that spot, and he thought it was wrong to bring together more than four roads in any place of that kind unless they made a circus and allowed sufficient room to permit of the traffic keeping to one side of the road. He agreed that it was, at the present time, a matter of some difficulty to reach Waterloo, and he imagined that that was the reason the South Eastern Railway Company took their lines over the river. It would not be so bad under the new scheme, but he thought that the suggested new South Eastern Railway Station would not be so convenient for people in the City and at Westminster. Mr. Middleton had referred to the probable income from the sites which would be opened up, but he thought this hardly justified the carrying out of the scheme. There was a lot of property in Southwark ripe for development, and he thought that the new bridges would do more for them than the scheme suggested by Mr. Middleton.

Mr. F. W. Speaight said, that one very great regret he had in regard to the suggested scheme was that he had not proposed it himself because he considered it was a very brilliant idea, and if he was in the position of the Managing Director of the South Eastern Railway Company, he would consider it well worth looking into. He thought it was a scheme that could not be brushed aside simply because at one or two points a congestion of traffic would arise. It was a most brilliant idea, and one which should receive very careful consideration before any adverse criticism was seriously passed upon it, because the result of criticism of an adverse kind upon a scheme in its infancy was that its promoter would hesitate to push it on to a successful issue. There was one point which Mr. Middleton and the other speakers had not touched upon, and that was with reference to the question of the railway traffic.

No one, he imagined, contended that the scheme was other than a traffic problem and not an architectural scheme in any way, and one of the main points to be considered was, he thought, how the scheme would facilitate traffic. It seemed as though it had escaped Mr. Middleton's mind that the people who at present travelled to the various stations on the North side of the river would still have to get there if they were turned out on the South side, and the large number of vehicles which would be necessary to cope with that traffic would almost, he thought, be enough to fill up the new road and leave very little room for additional traffic. He would have liked to have seen some figures from Mr. Middleton as to the number of people arriving at the stations concerned during certain hours of the day. Architecturally speaking, if he had been Mr. Middleton he would have suggested pulling down and rebuilding the Mansion House, in order to obtain the proper vista the suggested thoroughfare leading to the Bank required. But he did not think it would be much good removing the two Banks somewhere down near the river. He also was of opinion that no scheme should be put forward by a professional man unless it was backed up by figures showing that it was a reasonable and businesslike proposal. The general public had almost come to believe that the architectural profession was composed of dreamers, because so many schemes were put forward which were absolutely impracticable, and therefore, when one of great brilliance was suggested it did not receive the attention which it deserved. If, however, it were backed up by figures showing the cost of the proposal and a reasonable probability of getting a profit then the matter would be more likely to be seriously entertained. He thought it was rather a pity that Mr. Middleton had not worked out his scheme a little more carefully from the financial point of view, before the public were invited to pass an opinion upon it.

MR. EDWIN J. SADGROVE, F.R.I.B.A. (Honorary Treasurer), in supporting the vote of thanks said, that in regard to Mr. Todd's suggestion that it would be better to do away with the arches of the railway road and made a new road on the ground level, he thought it was obvious that if that were done they could not make use of the existing bridges to get across the river in the sense intended by Mr. Middleton. Some caustic references had also been made to the approaches from the North and South, but he thought Mr. Middleton's scheme compared very favourably with the Corporation's proposed new St. Paul's Bridge in that respect. In the latter case the scheme did not go very much further than giving them a new bridge across the Thames, while in Mr. Middleton's idea they would get three new bridges. In the St. Paul's Bridge scheme no proposition had been put forward for widening the roadways North and South beyond the immediate approaches to the bridge. Another comment which had been made was the congestion of traffic at certain central points, and it appeared to him that in having three new bridges it would invite the traffic away from those points, and instead of congesting it Mr. Middleton's scheme must automatically relieve it.

No further questions being raised, a hearty vote of thanks was accorded to Mr. Middleton for his paper.

MR. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), in reply said, he was a little disappointed in the discussion and would have liked to have heard many more points brought forward, and, although, the criticism had been somewhat sharp in places it had come from comparatively few of the many interests represented there that evening. Mr. Harrison was right in saving that his scheme was not a fully matured one, and it was necessarily so because the idea had come to him while listening to Mr. Burns' speech at the opening of the Town Planning Conference at the Guildhall, and when he offered to read a paper on the subject before the Society the only date open this session was the present one, and therefore he had very little time in which to prepare his scheme. Again, he thought, if anything was to be said on the matter at all it would have to be said before the St. Paul's Bridge scheme had gone too far. He would also say that he had but one assistant, Mr. W. G. Kerby. whom he could at the time put on to the necessary drawings, and he thought that they would agree that he had done as much as possible. Something had been said about the height of the buildings, that those on the high level would dominate those on the low level, but he had explained that shops on the high level would be above shops on the low level-one above the other-and so far as he could see the height limit under the London Building Act would be measured from the lower and not from the upper road, and uniformity would thus be secured. The shops on the high road would not be eighty feet above the level of the high road, but eighty feet above the low road. He had been asked whether it would not be more economical to remove the present railway arches and substitute a road on the ground level, but in his opinion it would be considerably more expensive to carry out than his proposal, and the same space would be wanted - right and left for shops to face the existing roads. It would be a far more extravagant scheme to carry out than the one he had put forward, because one of the great points of his scheme was that the road already existed. Another criticism was that the suggested new road ought not to cross Ludgate Hill, and that the existing railway bridge should be done away with as interfering with the view of St. Paul's. All of them had, no doubt, seen views showing that bridge with St. Paul's in the distance, and artists did not seem to think it was such an eyesore, though he thought architects did. In any case it was imperative for a traffic matter to carry the road over the present bridge at that spot if the scheme was carried out at all, and he did not think it was entirely impossible to reconstruct or cover it in so as to bring it into harmony with the Cathedral beyond. Something could, no doubt, be done there which would leave London no worse than it was at present, and possibly very considerably better. As his scheme was only in the sketch stage, he might say, that he was quite in agreement with Mr. Harrison in

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that the debouches would be better if they were made longer and of an easier gradient. He had simply shown his idea, and as he had proceeded to think it out several ways in which it could be improved had occurred to him, but he had put it forward as it was, in the hope that something might come of it. As architects, they had all had it drilled into them at the Town Planning Conference, that if Wren's scheme for the reconstruction of London had been carried out they would have had a fine London now. Here, he thought, was an opportunity of doing for South London, very nearly what Wren would have done for North London. If they let it pass now they let it pass for all time. They now had a great opportunity, and he only hoped that London and the Railway Companies would rise to it.

New Council Schools built by the Ilkeston Education Committee at Hallcroft were opened recently. The two blocks of schools are of the pavilion type. The two central classrooms are so arranged that by throwing back a screen the advantages of the central hall in the old type of school is practically obtained. Each school consists of six classrooms, and accommodation is provided for 680 children. Connecting the pavilions are corridors opening on both sides into verandahs. The buildings are lighted by electricity, and the total cost is just under £10 10s. per head of the accommodation. The architect was Mr. H. TATHAM SUDBURY, Lord Haddon Road, Ilkeston.

MR. CHARLES BALL drew a large audience to the schoolroom of Christ Church (Congregational), in Ashburton Road, Southsea, by his lecture on "Westminster Abbey." Commencing with a plan of the Abbey, he briefly sketched the shape, history, rebuilding, and restoration, and then conducted the listeners round the Abbey, both internally and externally, drawing on his copious stock of detail and anecdote. Of especial interest is the Poets' Corner, where with those of other famous men lie the remains of Portsmouth's greatest man, Charles Dickens, the most popular, if not the greatest, of all Victorian novelists. The lecturer ended in the Jerusalem Chamber, where, according to Shakespeare, died Henry Bolingbroke, who had dreamt that he should expire in Jerusalem. The Chair was taken by the Pastor, the Rev John Wills, and at the conclusion of the lecture he proposed a hearty vote of thanks to Mr. Ball.

The Preliminary Education of Professional Men.

In an article on this subject appearing in *The Secretary*, the official organ of the Institute of Secretaries, the writer draws attention to the fact that the conditions of modern life necessitate a complete remodelling of the whole plan and scheme of education. His remarks, though directed more particularly to the members of his own profession, are capable of wide application, as the title indicates, and in the absence of any compulsory scheme of education as a preliminary to the practice of architecture, may be of interest to many who feel that the question of preliminary education is one that calls for particular attention in relation to the profession of architecture.

There has been a tendency, says the writer of the article, to discourage pure culture subjects as distinct from the utilitarian. The study of our own language is often treated too lightly, so that few are capable of precise composition until they are considerably advanced in years. The use of Latin as an introduction to the study of modern languages is not so fully appreciated as formerly, and the time which was devoted to both Latin and Greek is frequently devoted to more directly useful subjects.

The advocates of a classical education hold that recruits from the "modern side" are often lacking in a comprehensive knowledge of English, while their vocabularies are limited, and, consequently, they not only fail to express themselves clearly and definitely, but also experience difficulty in grasping the meanings of unfamiliar terms, which are clear to those possessing a fundamental knowledge of Latin and Greek.

On the other hand, many hold that modern languages afford equally good mental training, and that methods of construction can be as easily cultivated by the study of modern authors. An acquaintance with modern languages is essential, and a more general acceptance of this view would undoubtedly promote the progress of civilisation and commerce. The study of English is within reach of almost every German pupil, whereas the study of German is declining in this country. Some teachers of languages would put German before French, for the reason that it goes better with Latin, particularly in the acquisition of a clear knowledge of the parts of speech and the methode of construction.

The wisdom of differentiating between classical and modern sides in schools has often been questioned, seeing that such classification comes at a period of development in the individual when an enforced broadening of culture, if practicable, would tend to larger views rather than to specialisation. There is, however, a better sense of proportion in our modern system of education, and if the older Universities have been somewhat tardy in recognising the necessity for modifications, the syndicates

accomplished a good work in the establishment of local examinations, which promoted a better standard of education in the schools. Other bodies have done similar service, and though the examinations may have induced at first an undesirable tendency to encourage cramming, the whole system of education now aims more in the direction of the training of thought rather than the mere accumulation of facts

A marked advance has been made in the direction of science teaching, which was practically non-existent until the last quarter of the nineteenth century. In most cases, the time devoted to classical languages had to be curtailed to make room for chemistry, physics, geology, botany, and the like. It developed in some a real enthusiasm for the study of natural phenomena, and, perhaps, afforded an escape from more irksome tasks. Similarly, subjects of commercial utility, such as shorthand and bookkeeping, are introduced, and this frequently at such a period that there is a danger that early specialisation may interfere with general culture. The difficulty lies in deciding the right time for its introduction.

While a good general education increases the chances of success of the average individual, defective general education in a professional man is a serious hindrance and is likely to bring discredit on his calling. For all professions the first essential is the production of good men with high ideals, and the duty of producing such men rests with the schools,

A parent or guardian can rarely be certain of selecting a calling which will be acceptable to an individual until the education of that individual has begun to make a marked impression on his character and inclinations. It is therefore safer in all cases, and more likely to be productive of satisfactory results, if he is educated on as broad lines as possible, with no special aim in view, and without particular reference to his future career. The broader the basis of his education, the greater are the opportunities of discovering his special bent, and the better is his cultivation of the power and habit of thought and general self-development.

The Royal Automobile Club, Pall Mall. The Society's Visit.

Last April, a paper on "Constructional Steelwork" was read before the Society by Mr. Bylander, who illustrated his remarks by reference to the work being done at the Royal Automobile Club.

A few weeks ago, members had an opportunity of seeing for themselves the building then referred to, and of learning something of the difficulties which had to be overcome during its construction.

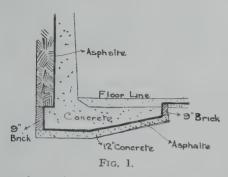
We are able by the courtesy of Surveying and the Civil Engineer, to give the following description of some of the constructional details.

The site of the club is 228 ft. by 140 ft., and is that which was occupied by the old War Office. One of the difficulties met was water, which was reached 40 ft. below the pavement level, and as the footings go down 7 ft. below this, two pumps had to be kept going during excavation operations.

As the sewer in Pall Mall is high all the sewage runs into special chambers below the basement floor level, from which it is forced upwards into the sewer by pneumatic ejectors.

The basement floor is also below the level of the sewer in the road, as well as below water level, and this necessitated a special damp-proof course of asphalt, which is $\frac{1}{2}$ in. and $\frac{3}{4}$ in. thick. This, as it were, forms a huge water-tight tank, passing under stanchion bases, up their sides, under the floors and retaining walls, and externally up the retaining walls, $\frac{1}{2}$ in. being the thickness under floors, and $\frac{3}{4}$ in. thick under foundations and in vertical positions. To prevent the water forcing the asphalt upwards in the case of floors, 12 in. cement concrete covering is employed.

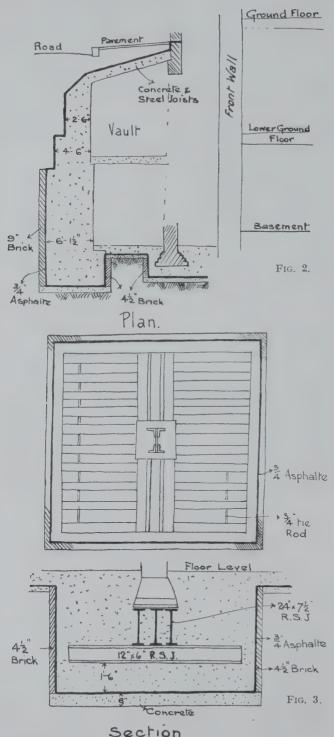
There are two retaining walls, one at the rear and one at the front, which, when compared, show how favourably reinforced concrete can be adopted for such work.



In the rear is a retaining wall 200 ft. long and nearly 40 ft. high, composed of Portland cement concrete in the proportions of 5 to 1, reinforced with indented steel bars of various sizes from $\frac{1}{2}$ in. to $\frac{7}{3}$ in. thick placed vertically with their lower ends curved into the toe and heel of the wall. These rods are also tied together with horizontal reinforcement. As will be seen in Fig. 1, the asphalt damp-proof course is carried under-

neath, and vertically up the back, being protected with brickwork externally. Now the thickness of this wall—although nearly 40 ft. high in places—at the base is only 3 ft. to 3 ft. 6 in. thick.

Royal Automobile Club, Pall Mall.

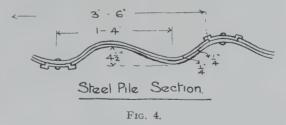


Compare this with the plain concrete retaining wall at the front, Fig. 2. This wall is only 25 ft. high, as against 40 ft. in the rear wall; yet as it is only in plain concrete, the thickness at its base is 6 ft., twice the thickness of a reinforced concrete retaining wall of nearly double the height. It has, however, a greater load to bear on account of the road above.

Turning to the foundations, steel grillages have been employed, and as these are at a great depth special precautions have been taken to prevent their interfering with the flues and drains if any settlement takes place and vice versâ. building being on the steel frame principle, all the loads are carried by steel stanchions, some of which have as much as 500 tons to bear. Fig. 3 will give a general idea of the arrangement of these foundations, a novel feature being the brick pits in which they stand. The brick sides are $4\frac{1}{2}$ in. thick above water level, and are increased to 9 in. below this level, as is also the bottom.

On account of the complicated foundations, it was found necessary to use piling, and steel sheet piling of the form shown in Fig. 4 was decided upon. The width of

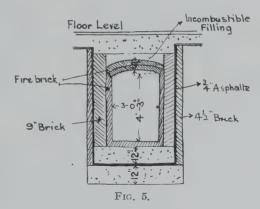
the pile is 3 ft. 6 in., and the length 15 ft.; the corrugations, which are to give extra strength to the pile, have 1 ft. 4 in. centres, and are $4\frac{1}{2}$ in. deep, the metal itself being $\frac{1}{4}$ in. thick. The piles being driven over-lapping, the thickness is $\frac{1}{2}$ in., the sheets being



jointed with a steel clip, as will be seen in Fig. 4. The piles were driven by an ordinary pile-driving machine, the ram of which, weighing $1\frac{1}{2}$ tons, had a fall varying from 1 ft. to 4 ft., the maximum distance a pile was driven being $\frac{1}{2}$ in. at one blow.

As the boiler-house is situate in the front of the basement floor, the main flue from the boiler to the chimney 50 ft. away had for structural reasons to be carried

about 4 ft. below the floor level, only having a slight rise to the base of the chimney. As this flue came partly below the water level, precautions had to be taken to prevent damp entering, the method adopted being as shown in section Fig. 5. The flue is 4 ft. 3 in. by 3 ft. There are several other flues of smaller size which are below the basement floor, and similar precautions have been taken, both to keep confined the intense heat (as in one



case the kitchen flue passes under the frigidarium in the Turkish bath) by an air space around the firebrick lining, and to prevent moisture entering by brick walls, etc.

To economize space the two large flues, one from the boiler and the other from the kitchen ranges, are made of steel tubes 4 ft. 9 in. and 3 ft. 9 in. diameter, lined inside with $4\frac{1}{2}$ in. firebrick, their heights being 122 ft. and 124 ft. Independent expansion and contraction of the steel flues and firebrick linings have been provided for, and entrance for inspection provided by means of cleaning doors at the basement floor. The thickness of the steel tubes varies, the first third of the height being $\frac{3}{4}$ in. plates, the second third 5-16 in. plate, and the upper third $\frac{1}{4}$ in. plates, the tops being protected with a cast-iron cap and weathering plate.

Royal Automobile Club, 94 Pall Mall.

Reinforced concrete lintels are employed over the window openings in the three elliptical bays to the swimming baths in the basement floor, and show the adaptability of this form of construction. The floor panels between the steel girders are formed of reinforced concrete indented steel bars, the thickness of the floors varying from 4 in. to 7 in. The loads the ground floor and lower floors were calculated to carry were 220 lb. per square foot, and the upper floors and reinforced concrete roof, 160 lb. per square foot. The concrete was composed of one part Portland cement, two parts sand, two clinker ballast, and two parts clinker, the mixture being made by machinery. The Portland cement was required to stand 600 lb. per square inch after eight days, the sand was screened to pass through a 3-16 in. sieve, and the gravel to pass a 3 in. diameter ring. Suspended concrete ceilings are employed, being of pumice-stone concrete 21 in. thick supported by inverted steel tees and steel hangers. Wire lathing on the underside of the tees forms a key for the plaster.

The swimming bath is made in reinforced concrete, with ½ in. bars at 6 in. centres to the walls, the metal running both vertically and horizontally. The back is lined

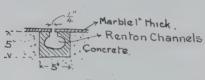


Fig. 6.

with asphalt, and the finishing surface is of Sicilian marble 11 in. thick, 3 ft. wide, and the depth of the bath. The use of reinforced concrete has enabled subways to be formed around the sides of the bath and the various pipes are run therein. They can thus be

easily got at for repairs, etc. The floor surrounding the bath is finished with Sicilian marble 1 in. thick, and a channel is formed as shown in section Fig. 6 to carry away the splashings from the swimmers.

Portland stone is used for the elevations with brick, pumice, and concrete for the internal walls. The treads to the staircases are a French stone, called "Eschalion," a fine-grained, light-coloured material not unlike Hopton Wood, without veins, and said to wear very well. The walls to the elliptical well and the columns in its upper portion, the strings and underside of the staircases and adjoining walls are finished with a French plaster, which has a close resemblance to stone. Being light-coloured it makes a very good match with the "Eschalion" stone. It is a plaster laid on in the usual manner, the wall first being prepared by dabbing with plaster of Paris, which makes a good bed. The surface is afterwards dragged, combed, and rubbed down in the same way as stone-work is finished, the tools used, however, being different from the English. Joints are carefully set out and raked 1/4 in. deep, and filled in with putty, the result being a fine resemblance to stone. The cost, however, is heavy, being about 6/- a square yard.

The premises are estimated to cost upwards of a quarter of a million sterling to build, the architects being Messrs. Mewes and Davis and Mr. E. Keynes Purchase, F.R.I.B.A.

The Standardization of Working Drawings and Instructions.

Arising out of the recent discussion at the Architectural Association on the question of Draughtsmanship, Mr. Halsey Ricardo, F.R.I.B.A., in an article in *The Architects' and Builders' Journal*, taking the point of view of the builder and his men, deplores the prodigality of output in the way of drawings and documents now considered necessary by the architect and suggests the desirability of simplification and standardization of these methods of conveying his intentions to the workmen.

Under the present state of things there is, says Mr. Ricardo, broadly speaking, no tradition as to construction extant. It is only in remote country places that you find the builder prepared to put in doors and windows (for example) without further particulars than as to their sizes and the positions that they are to occupy in the walls. Under the contract system, and with elaborately tabulated quantities taken out for it, and probably to serve as a basis for competitive tendering, every crevice and cranny of construction has to be explored and delineated, and a cottage that used to be erected by the village builder from drawings made on a board with a lump of chalk, requires now a treatise on the building commandments, called a specification, and a wheel-barrowful of working drawings.

If such wealth of instruction is requisite and inevitable, is it not time to consider whether something could not be done to standardize this prodigality of output, and render it more easy of digestion and assimilation by the workman who has to deal with it? It is all very well for the producer of the drawings—he has got the whole building in his mind's eye, and he is, so to speak, working down from three dimensions to two, a fairly simple task; but the builder's foreman has to create in his mind the solidity and effect of the finished building from detached representations, constructing from information presented in two dimensions a conception of the whole. And unless he has worked under the architect on previous occasions, he has the additional labour of having to acquaint himself with the particular language used graphically by the architect.

Scale and Colouring.

In one very important particular, and that is the matter of scale, we are pretty well agreed. The drawing of the building as a whole is done to $\frac{1}{8}$ in. scale, as a rule; details of special parts of construction and particular features to $\frac{1}{2}$ in. scale, fittings and so forth to 1 in. scale, contours and finishings full size. It is too late in the day, I suppose, to exclaim against the universal adoption of the $\frac{1}{8}$ in. scale, as being both at once too big and too small. If the plans and elevations to this scale are to serve merely as key plans to explain and connect the separate treatment of the parts or

details, it is needlessly big—whilst it is too small to delineate and make it carry upon it all the information one would like to place there, for the sake of compactness and ready accessibility; consequently a good deal of work has to be done over again to a larger scale. If only $\frac{1}{16}$ in. had been taken to equal one foot, we might have had to enlarge our drawing boards and struggle with "double elephants," but we should have saved the number of our drawings. Still, it is a great thing to have an accepted scale, and, like the pianoforte player, who can tackle his two clefs, after much drilling, as part of the day's work, it's the intrusion of the tenor clef that makes the score so hard to decipher; so an unaccustomed scale, such as $\frac{1}{4}$ in. to the foot, requires a special tuning of the mind before one can put it into one's normal estimate of its size, or see where exactly it takes its place.

The matter of colouring is worth considering. Elevations should be coloured—they generally are—to look as much like the materials to be used, as, in a simple way, they can. And shadows thrown approximately accurately, according to some universally recognized and accepted canon, help the workman to visualize the object before him. But it is when we come to use colour to denote, in plan and section, the material intended to be employed, that some standard of uniformity would be of such comfort to the builder. Why should there not be accepted colours for brick, stone, lead, iron, carpenters' timber, joiners' woodwork, and so on, in section and in elevation, so that one could see at once whether the grey blotch on the section was a stone lintel, or a concrete beam, or counter-lathing to be plastered, or a roller blind, without having to hunt-through that un-indexed volume, the specification, to ascertain what was made enig matical by the colouring?

The Specification in Relation to the Drawings.

The bulk of the specification, too, might be reduced, if it were taken as an accepted axiom that it was purely supplementary to the drawings; that the drawings were to show, by careful delineation and profuse figuring of scantlings, as well as dimensions of areas and heights, everything that a drawing could be made to bear, and that the specification was to contain those things only that could not appear on the drawings. At present a great mass of information is duplicated, a needless trouble in the first instance to compile—and a lasting plague to the unhappy foreman who has to turn over page upon page of superfluous verbiage, in his hunt for the piece of information he really wants. The duties of the foreman are arduous enough as it is; he has to live in the future tense as well as in the present, with the past turning up (at best) in the watches of the night, and anything that can make the medium of communication between him and the architect more easily and quickly intelligible deserves consideration.

A Great London Improvement Scheme.

By Mr. G. A. T. MIDDLETON, A.R.I.B.A., M.S.A.,

Past Vice-President of The Society of Architects.

HE problem of the improvement of London is one which has been claiming more attention every year for a long while past. In particular it has become evident to all observers that the means of communication between the north and south sides of the river are insufficient. Within comparatively recent times a road tunnel has been opened in the East of London, the Tower Bridge has been built, and London and Blackfriars' Bridges have been widened; yet the cry is for still more bridge accommodation, and this in spite of the fact that the substitution of motor for horse traffic, with its increased speed and reduction of space occupied by individual vehicles, has considerably enhanced the carrying capacity of each bridge. Various proposals have been put forward from time to time to accomplish the desired end, that most favoured at the present moment being the erection of an additional bridge, to be known as St. Paul's Bridge, by the Corporation of London, involving alterations upon both sides of the river which would be exceedingly costly.

Whatever is done, it is necessary that the South of London should to a certain extent be re-planned. There is a great area lying along the South bank of the river which is greatly in need of development, consisting at the present time almost entirely of small property, yet capable, if properly connected with the wealthy north, of being made an integral part of the productive, working Metropolis.

It requires something more than the erection of an additional bridge and its approaches to do what is required.

In addition to St. Paul's Bridge, there has been a good deal heard of late of the need of an extra bridge either at Charing Cross or the Temple. The first practical suggestion with regard to this was made in a leading article which appeared in the Building News for December 22nd, 1905, immediately after the disaster to the roof of Charing Cross Railway Station, in which it was suggested that a great opportunity had arisen for transferring the terminus of the South Eastern and Chatham Railway to the South side of the river, close to Waterloo Station, and for opening out Hungerford Bridge (which is generally known as Charing Cross Railway Bridge), to road traffic. A rough sketch plan accompanied the article, showing how this might possibly be accomplished. Sir John Taylor and Mr. T. E. Collcutt, speaking in turn from the Chair of the Royal Institute of British Architects during the following year, both advocated that the same thing should be done, and so also, somewhat later, did Professor Beresford Pite, while Mr. Collcutt, in partnership

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with Mr. S. H. Hamp, produced a design for a bridge, which would serve much the same purpose, in continuation of Northumberland Avenue. This design was hung in the Royal Academy, and was notable for the suggestion that there should be shops upon either side of the roadway.

For some time nothing more was heard of the suggestion, until Mr. John Burns, in his speech at the Guildhall, at the opening of the recent Town Planning Conference, stated that he would like to see not only Charing Cross Railway Bridge done away with and a station put on the South side, but that he would dearly love for the Cannon Street and Blackfriars' Railway Bridges to be similarly treated. It was fairly obvious, however, that he did not think the idea to be practicable.

Its practicability is a matter which demands a considerable amount of attention. The three bridges in question all serve termini of the same Railway Company, the South Eastern and Chatham. At the time when they were built, the South Eastern and the Chatham and Dover Railways were distinct and in competition for the Continental traffic by the short crossings via Dover and Folkestone. Each of them was anxious to have both a West End and a City Station. At that time it was important that each should serve the North side of the river with ease. The two Companies have now combined, and it must be a serious encumbrance to them to possess, besides their West End Station at Victoria, three ofher termini, each involving an independent staff, the up-keep of a bridge, and a large amount of unnecessary train mileage. Even five years ago, before motor traffic had developed to the extent to which it has now, there was a considerable amount to be said in favour of the North river stations which does not apply at present. Provided that a good central terminus could be built on the South side, readily accessible by main roads both from the City and the West End, the railway company would gain rather than lose by the change. Fortunately, there is a way of doing this which has been provided by the railway itself, in not merely an economical manner, but in a way which should be actually profitable to the company most concerned. A high level road, carried upon arches, already exists across South London from Charing Cross to Cannon Street. Railway metals are laid down on it at present, but it would not be at all a difficult thing to replace these by a highway, forming a great Circular Road, 80 feet wide, particularly valuable for rapid motor traffic, and with debouches so arranged as to connect it at all important points with the main highways of South London.

While obtaining Parliamentary power for such a road, there would probably be no difficulty in at the same time securing property on both sides of it, so as to form two parallel lower roads connecting Borough High Street, Blackfriars' Road and Waterloo Road. These would be lined with shops and business premises, and those backing on to the arches of the high level road would carry more shops facing that road also. The property to be thus dealt with is almost all of it of small value at the present time, but would become of great value on conversion.

Instantly the whole district lying between the new circular road and the river would be opened up. The improvement would be vast in itself, but it would lead to a great deal more being done in the future. It is a district which, as will soon be seen, would be served by three great railway termini, and it could not fail to develop.

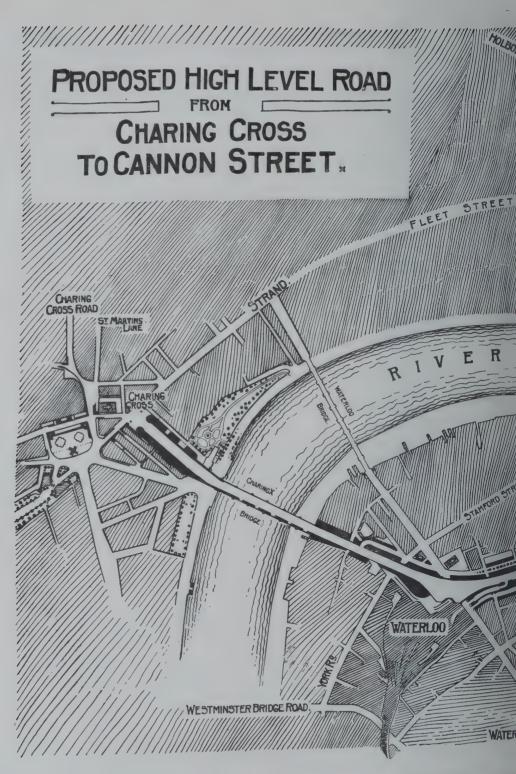
The construction of this high level roadway would involve the destruction of both Charing Cross and Cannon Street Railway Stations and their accompanying Hotels. A new terminus would have to be provided to replace them. The best position for this would undoubtedly be close to the Blackfriars' Road, where the higher level line from Holborn Station crosses the present loop line from Charing Cross to Cannon Street. The high level line could, of course, be left, but the preferable thing would be to deal with it in the same way as with the loop line, converting it into a roadway with shops on both sides where the available width permitted. It would then serve the new South Eastern and Chatham Railway terminus from Holborn and the North of London.

Thus, one great terminus would replace the present three at Charing Cross, Cannon Street and Holborn, the greater proportion of the traffic to which, would almost surely be retained, owing to the ready means of reaching all parts by motor 'bus which the new road would provide. New traffic, too, would be created, to serve the needs of the new roads, and of the considerable area opened up for business purposes.

It would, however, be necessary, at some expense, to divert the main South Eastern line at New Cross and raise it so as to pass over the Brighton line, and then connect it across to the new station. This would render the present London Bridge Station of the South Eastern and Chatham Railway unnecessary, and the metals between it and New Cross of no value. But the London, Brighton and South Coast Railway is badly in need of both more station accommodation and more metals, which could be provided by allowing that Company to use the present South Eastern metals, and to build a new station on the Circular Road, which would serve it a great deal better than the present London Bridge Station is served. There is an excellent site for it to the south of Southwark Cathedral in the fork formed by the existing metals of the South Eastern and Chatham Railway, and above the Borough Vegetable Market, which could be well accommodated underneath.

A third railway whose interests would be involved is the London and South Western. The new Circular Road would pick up Waterloo Station on its route, and provide a much needed high level approach to it, easily reached by motor-bus or taxi-cab from the City at Cannon Street, the North at Holborn, and the West at Charing Cross.

In the scheme thus roughly outlined the interests of three great railway Companies—the South Eastern and Chatham, the London, Brighton and South Coast, and the London and South Western,—are thus intimately involved. To carry it out to





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completion would require a certain amount of negotiation between them. This is no more than could be accomplished if all entered into the matter with the determination that fair justice should be meted out to all. Probably, the work could best be done by the South Eastern and Chatham Railway alone, the others contributing such shares or taking such profits as might be just; and the profits would be very large indeed, even after allowing a fair share for the present value of the roadway and the cost of acquiring the necessary additional land, and undertaking the large amount of new building involved. It is only necessary to suggest that, on a conservative estimate, some ten miles of frontage would be created which would be available for shops, offices, hotels and warehouses, to indicate that an enormous profit rental would accrue.

Three great termini, near Waterloo, Blackfriars', and London Bridges would now be located on the new Circular Road, and each be at its level, as the Waterloo terminus is already. The greatly improved means of intercommunication thus provided between them should be equally advantageous to all. They would also have booking offices on the level of the lower roads, connected with the rail level by lifts and stairways, as is done at the Central Station at Antwerp, and elsewhere on the Continent. It is, by the way, somewhat astonishing that this plan was not originally adopted at Waterloo in place of the existing steep inclines for cabs.

It might be necessary, and in fact it is so shown on the accompanying diagram, that there should be a still higher level again at Blackfriars' Station, in order to utilize the present railway metals which now go to Holborn, these being possibly employed for Continental and main line traffic only, the middle level being used for suburban traffic, and the low level, entered from Blackfriars' Road, being given up to a goods' yard and sidings from which trucks could be raised by lifts to the rail level above.

Considering the scheme in somewhat greater detail, it will be obvious at once that many architectural opportunities present themselves. Charing Cross Station and its Hotels would give way to a square, with probably a new hotel along one side of it and fine shops along the other. As a considerable number of houses to the West of the present Station belong to the Railway Company, it might be possible to include them in the area dealt with, although this is not indicated on the diagram. The Railway Bridge, as it stands at present, is certainly not a thing of beauty, yet anyone who has studied it must recognize that there would be no great difficulty in so encasing both the piers and the girders with concrete, and facing this with stone, as to convert an eyesore into something which was at least dignified and worthy of the river. The external girders need not be interfered with, though probably the other main girders would have to be replaced by new ones of a different form, again embedded in concrete, so as to form the front of shops which would face the roadway, a few gaps being left here and there to enable pedestrians to obtain a glimpse of the fine vistas along the river. The bridge is so exceedingly wide that this could be done, and yet leave an

80 ft. roadway. When Waterloo Station is reached, another open space could be provided which ought to be capable of architectural treatment, and the debouches to be arranged down to the outer and inner parallel circular roads and the main roads of South London, should all provide further opportunities also. As soon as the shops facing the lower roads were built, and those facing the upper roads erected above them, the present ugly railway arches would be cased in, and a fine architectural treatment secured throughout the whole length of the new roads.

At Blackfriars there would be another great architectural opportunity provided, where the road from Holborn would cross at its high altitude over the Circular Road, close to the new terminus of the South Eastern and Chatham Railway. Possibly, a great deal more could be done here than is indicated on the diagram. At any rate, an important Railway Hotel would have to be provided, and a square would be formed on the lower level, opening out of Blackfriars' Road, to at least make up for the loss, as an open space, of a present existing square whose existence is not generally known. The terminus of the Brighton line at London Bridge would afford yet another opportunity, especially if a debouche were made from the new roadway, to the foot of London Bridge, on the north side of Southwark Cathedral, which would thus be opened up, and if the present warehouses and wharfs along the river side were replaced by a great hotel and an embankment.

Cannon Street Railway Bridge would be dealt with in the same way as that at Charing Cross, and the Station opened out in a somewhat similar manner, with hotels, shops, and offices erected on either side of the broad approach thus formed, There might be a little trouble here in connection with the Underground Station, but for the fact that it is an unnecessary station in any event, owing to the proximity of the Mansion House Station. Do away with this station and there would be no difficulty then about the levels, as the descent from the bridge to Cannon Street could be quite gradual. Here, however, if the advantage of the bridge is to be felt to the full, something serious would have to be done. An approach to it would have to be provided from the North, and not alone from Cannon Street. If it were attempted to do this by widening Walbrook to the full width of the present space to the West of the Mansion House, the destruction of the Church of St. Stephen. Walbrook, would be involved, and, considering that this is one of Wrenn's masterpieces, nothing of the sort could be contemplated. Similarly, to widen St. Swithin's Lane would involve the destruction of St. Swithin's Church. Nor would either of these alternatives provide a direct approach to Cannon Street Bridge, nor greatly ease the communication on the North to the junction of Princes' Street, Threadneedle Street and Cornhill. This is only to be obtained by cutting a new road through, where shown on the diagram, from Cannon Street to the East of the Mansion House; which would be thereby opened out to view as it never has been in the past. It would be an expensive thing to do, as Salters' Hall and two banks, to say nothing of less valuable property, would be destroyed. New sites for these would have to be

provided and new premises built. As, however, the provision of the new road bridge at Cannon Street would do away with the necessity for the St. Paul's Bridge, it is perhaps not too much to ask that the cost of this improvement should be borne by the City of London; in fact, it may perhaps be suggested here that a considerable proportion of the outlay involved in converting railways into roadways might very justly fall upon the London County Council and the City.

Just as there would be shops on Charing Cross and Cannon Street Bridges, so others would also be built on the Bridge at Blackfriars, which could be utilized to relieve the traffic across the present Blackfriars' Bridge by forming a debouche to Queen Victoria Street. St. Paul's Station would, of course, be done away with, and a good opportunity is again offered here for architectural treatment. Another debouche to the North of Queen Victoria Street, though not shown on the diagram, could easily be made, and would provide a much needed rapid means of communication from Holborn to the Victoria Embankment.

Yet, it is at Holborn that the greatest opportunity of all occurs. By a little boldness of treatment and the acquisition of existing property, it would be possible to open out a really fine space in front of the Central Criminal Court. This would provide access to the new high level road from Giltspur Street and the North as well as from Newgate and Holborn.

And, finally, what would be the gain to London?

There would be three new bridges provided between the North and South sides of the river, where the demand is at present for one. These bridges would be of such width as to ensure a sufficiency of intercommunication for the next hundred years to come. There would be a fine roadway connection from North to South and another from East to West, linking up all the main roads on both sides of the Thames, adding immeasurably to the possibilities of the architectural treatment of our great City, and providing for its growth, as a business centre, over, an area in the South which is at present a maze of slums. But the beauty of the whole thing is that the necessary roadways already exist in the main, and although the subsidiary roadways and the debouches are valuable and perhaps essential to the scheme, they could be easily provided. Another great point in its favour is that the whole thing could be carried out at a profit, provided that it were tackled courageously by the persons most interested. Greater things than this have been done by Englishmen in the days when our railways were laid down; surely they could be accomplished now by the same courageous Railway Companies, especially as simultaneously there would be valuable property created and a great London improvement effected.

A New London.

One result of the Town Planning Conference was the emphasizing of the fact that many large towns are suffering now from the want of forethought on the part of those responsible for their original lay out, and there being consequently, no settled plan to which subsequent improvement schemes would be but the amplification of the original idea.

London is a striking instance of this, and those who now bring forward schemes of improvement are faced with disheartening difficulties, and can scarcely hope to see their ideals realized; but on the other hand, it is only by suggesting what might be done that people are made to think of possibilities.

Mr. Middleton's proposition gives food for thought, and has secured wider publicity and consideration than any subject which has been brought before the Society for some time past.

The following are some of the comments on his scheme:-

A GREAT LONDON IMPROVEMENT.—A very comprehensive, and costly, scheme for a great London improvement was put forth by Mr. G. A. T. Middleton, at The Society of Architects' meeting. Briefly, says *The British Architect*, Mr. Middleton proposes to make a great arterial communication from Charing Cross over the river and round the south side of the Thames, past Waterloo Station and London Bridge Station, over London Bridge, and right up to the Bank. A direct north and south road would pass over Blackfriars Bridge, ending on the north in the Holborn Viaduct at Newgate Street, and on the south at a point on the new southern road half-way between Waterloo and London Bridge. The scheme looks very convincing on paper, and we refer our readers to Mr. Middleton's address on the subject.

First in importance amongst Mr. Middleton's statements is the fact that the South of London urgently and peremptorily needs re-planning, for he well points out that there is a great area along the south bank of the river which needs development. We see no mention of a great southern embankment to the Thames, which ought to have been provided for long since, and ought 'ere this to have been far on the way to accomplishment. But what we chiefly welcome about Mr. Middleton's scheme is that it makes some adequate provision for perhaps a hundred years to come, instead of the piecemeal and haphazard fashion in which we are proceeding to-day. A strong point as regards the feasibility of the suggestion is that a high-level road carried upon arches already exists across South London from Charing Cross to Cannon Street, and, says Mr. Middleton, it would not be at all a difficult thing to replace the railway metals and railway track by a great circular road, 80 ft. wide, with debouches so arranged as to connect it at all important points with the main highways of South

A New London.

London. The provision of three new bridges across the Thames, with shops upon them, and full protection from the weather, is none too fine a scheme for the City of London, and we ought all to be grateful to those who endeavour to demonstrate the practicability of adequately providing for the future, in such a way as Mr. Middleton suggests. The details of the scheme may be gathered from our report of the Paper; and from these it will be seen what an immense boon to the travelling public such a plan would prove, whilst the opportunities for fine architectural development would be immense: Mr. Middleton says it would pay hugely.

Is it not about time that a congress was called to consider the future development of London? How long are we going to muddle along as at present? Our finest architectural projects are being nullified, one by one, as we may see exemplified by the New Bailey and the County Hall. One marvels at the position of London to-day, in face of its needs and its possibilities. The only sign of hopefulness is in such eye-openers as to the possibilities which such Papers as this of Mr. Middleton's provide.

THE NEW LONDON.—Reconstructing London is a fascinating occupation, says the Evening Standard. We are not surprised that so many indulge their fancy in this direction. A big scheme was outlined by Mr. G. A. T. Middleton to The Society of Architects. Inspired by the necessity of better communication between the north and south banks of the Thames, Mr. Middleton suggested that, as a high-level railroad carried on arches already existed, it might be transformed into a highway particularly available for rapid motor traffic, with debouches so arranged as to connect it at all important points with the main highways of South London. The construction of this roadway would involve the destruction of Charing Cross and Cannon Street Stations and Hotels, and a new terminus would have to be provided to replace them, say, in the Blackfriars Road. So far, the scheme involves a large amount of destruction. But Mr. Middleton proceeded to argue that some ten miles of frontage would be cleared, and, being available for shops, offices, hotels, and warehouses, would bring in an enormous profit rental. Moreover, there would be many architectural opportunities—a square at Charing Cross, improvement of the railway bridges, and so on. The improvement of the railway bridges would certainly be a boon. Charing Cross and Cannon Street are abominable disfigurements. They are an outrage on the river. It can never be viewed with entire satisfaction as long as they remain in their present state of hopeless, extraordinary ugliness.

A FASCINATING IDEA.—Architects dream dreams, but they so seldom come true. Mr. Middleton's idea, presented the other night to The Society of Architects, is a fascinating one, says the *Westminster Gazette*. A turning of the railway from Charing Cross to Cannon Street into a wide road for swift motor traffic,

the erection of a central station south of the river, with the abolition of several of the disjointed stations north of the river, the turning of slums into sweet and airy streets, and all of it done at a profit not only of health and convenience but of money. It requires courage. And we have so often missed our chances of town-planning. If only Christopher Wren had been given a free hand after the Fire of London! Only now and again has the architect had the chance of designing a city. There is the opportunity now in the Federal capital of Australia. Constantine took it, when he rebuilt Byzantium as his new capital of Constantinople. But that is not perhaps the most encouraging example. The best we can do now is to get the architectural physician to tinker with our chronic infirmities.

IMPROVING LONDON.—A new suggestion for improving London was put forward recently at The Society of Architects, by Mr. G. A. T. Middleton, Past Vice-President. It is, says the *Railway News*, an outcome of Mr. John Burns's recent proposal for abolishing Charing Cross and Cannon Street Railway Bridges. Mr. Middleton would only abolish them as railway bridges, and convert the whole course of the line between Charing Cross and Cannon Street into a great high-level road, 80 ft. wide, particularly valuable for rapid motor traffic, and with debouches so arranged as to connect it at all important points with the main highways of London. His scheme is partly inspired to give South London, in the Stamford Street and Southwark quarters, greater prestige than it possesses now.

A New London.—Various plans for the improvement of London have recently centred round schemes for commemorating King Edward, and an exposition of some of them was to be presented to The Society of Architects by Mr. G. A. T. Middleton, A.R.I.B.A.; under the title of "A Great London Improvement Scheme." His chief idea, says *The Graphic*, is to replace Charing Cross, Cannon Street and Holborn Stations with a great terminus on the south side of the river close to Blackfriars Road. The following article shows how architects in the past have drawn up similar schemes.

"Many vast improvements have been carried out by the City of London of which the public are scarcely aware. One scheme, over a century old, possesses significance at the moment in view of the proposed St. Paul's Bridge. This suggestion, although approved by the authorities both on the score of its practical and architectural value, was never adopted on account of the sacrifice of valuable ground it entailed. But this is a sacrifice which has always to be faced by great communities in the matter of public improvements; and when our authorities hesitate on the brink of a fine idea, we would refer them to the examples of France, Germany and Austria, where a more enlightened, and, in the long run, a more economical policy prevails.

"In the 18th century the existing London Bridge, continually in need of repair, had become a serious obstacle to the growing demands of shipping. It further

obstructed the natural course of the tide. Schemes for a new bridge were invited, and some five or six sets of designs were submitted. That of George Dance, the City Architect, was finally chosen as best, uniting the 'several advantages of convenience, ornament and economy.' Dance, probably the most brilliant architect of his time, combined with his official position, as the City Architect, the Chair of Architecture at the Royal Academy, of which he was one of the original forty members, while at the same time he carried on an extensive private practice. In architecture his most notable building was Newgate Prison, replaced a few years ago by the present Sessions House. He was a man of spacious imagination, and carried his scheme beyond the bridging of the river into the realm of ample spaces, fine vistas and imposing thorough-fares, realizing, in effect, that a fine bridge is worthy of a fine approach.

"The design for a double bridge on such a scale is, we believe, unique, while its practical purpose of maintaining uninterrupted traffic both in and across the river (through its system of drawbridges) cannot for the needs of the times be questioned. But Dance went further. His scheme included the embankment of the river above and below the bridge, the erection of quays and a line of warehouses extending to the Tower, with dock entrances and terraces on arches, the Custom House being placed in the centre. The amphitheatrical areas at either end of the double bridge are a notable feature of his plan; and if we carry our view further we will see that he opened up a series of spacious thoroughfares in axial line with the Dome of St. Paul's -a scheme beyond even the dream of Sir Christopher Wren's plan for laying out of the City after the Great Fire. Dance anticipated by a century or so the problem now agitating the minds of those engaged in the discussion of the site of the new St. Paul's Bridge by opening up a broad thoroughfare from the river in line with the dome of the Cathedral. No bridge in the neighbourhood was then in contemplation. But if Dance's scheme had been carried into effect, there would have been no problem, no agitation. The moral of all this is that present parsimony in the matter of public improvements often places an intolerable charge on posterity."

A Novel Town Planning Proposal for London.—The Evening News in an illustrated article says: "In the re-planning of London modern architects put forward bold schemes, but perhaps the boldest of all is the proposal made before The Society of Architects that four great railway termini in London shall be swept away, that two new termini shall be built south of the Thames, and that railways linking up three southern railway termini north of the Thames shall be converted into roads for ordinary traffic.

"These, in a few words, are the proposals for what their author, Mr. G. A. T. Middleton, Past Vice-President of the Society, describes as 'A Great London Improvement.'

"He starts with the proposition that it is of the first necessity that the South of

London should to a certain extent be re-planned, first because it is in need of development, and, secondly, because in his judgment it should be made an integral part of the productive working Metropolis.

"Unlike any other scheme for new roads in London, this is not, except to a slight extent, dependent upon municipal effort; it is one for three railway companies to undertake, and apparently the high level road to be formed would be, for all practical purposes, railway roads connecting the various termini, yet forming a new route from the Bank to Charing Cross.

"Mr. Middleton argues that it must be a serious encumbrance to the South-Eastern and Chatham Companies to possess, besides their terminus at Victoria, three other termini 'each involving an independent staff, the upkeep of a bridge, and a large amount of unnecessary train mileage,' and he goes on to say that the abolition of these termini would be of advantage to the companies concerned, provided that a good central terminus were built on the south side, readily accessible by main roads both from the City and West End.

"If this were done, Cannon Street and Charing Cross Stations, with their hotels, would be swept away. The new station could be erected near to Blackfriars Road, where the high level line from Holborn Station crosses the present loop line from Charing Cross to Cannon Street.' Holborn Station would then not be needed.

"Ten miles of frontage would be created, says Mr. Middleton, all available for shops, offices, hotels, and warehouses, and yielding an enormous profit rental.

"The architectural opportunities are, he continues, many.

"Mr. Middleton devotes a good deal of attention to the engineering difficulties which would present themselves. He admits that at Cannon Street something serious would have to be done." There must be a northern approach, and he chooses a direct line with the bridge running by the east side of the Mansion House into the open space in front of the Royal Exchange. The expense would be enormous, but the new road bridge at Cannon Street, that is to say, the use of the present railway bridge as a road bridge, 'would do away with the necessity for St. Paul's Bridge.'

"The greatest of all the opportunities lies, he thinks, at Holborn, where by the abolition of the terminus there 'a really fine open space in front of the Central Criminal Court' could be provided.

"Summed up, Mr. Middleton claims that by the adoption of his scheme London would gain immensely."

Metropolitan Improvements.—Architects and engineers, says *Engineering* in a leading article, perhaps, inevitably regard the subject of town planning and of city improvements from opposite standpoints. The engineer considers a new roadway as essentially a fresh artery for traffic, whilst to all appearance the average architect is more concerned in providing the citizen

with a picturesque perspective than with lessening the labour by which he earns his daily bread. An ancient bridge, humped like a camel, excites strong but quite dissimilar, emotions both in the architect and the engineer. To the latter it appeals mainly as an example of how greatly dead and gone constructors were handicapped by their indifferent knowledge of mechanical principles, and by the limited choice they possessed of tools and material. His soul is saddened by realizing the incessant waste of energy required to haul a load up to the crown of such a bridge. merely to lower it again to its original level on the opposite side of the river, and he has little sympathy for such so-called artistic considerations as in practice simply spell obstruction to traffic. Art which demands such sacrifices of essential principles of mechanics and economics must, he feels, be based on inherently unsound foundations; and, indeed, when the problem is considered as a whole, it is difficult to feel much sympathy for an æsthetic sensibility which would not rather see draught animals hauling their loads over even the plainest of level girder-bridges than struggling and panting with them up the heavy inclines adopted by our forefathers, and still considered so picturesque by the traditional school in architecture.

The proposal of the City Corporation to construct a new bridge across the Thames near St. Paul's has demonstrated once more the inability of some architects, with their artistic temperament, to attach due weight to practical business considerations. It is the fashion to sneer at the latter, but Art and Letters would both fare badly did not successful Commerce leave, after the necessities of life are satisfied, a substantial margin for the support of its somewhat affected and braggart sisters. No sooner had the Bridge Estate Committee published particulars of the plans for its new bridge and approaches, the line recommended for which had only been adopted after most careful and thorough investigation by such extremely competent authorities as Mr. Basil Mott and Sir Alexander R. Stenning, than a committee of the Royal Institute of British Architects were, on the instant, ready to offer an alternative scheme, in which the sole points considered were the provision of a good view of St. Paul's and an opportunity for the expenditure of many hundred thousand of pounds in rebuilding along the line of route. Apart from the additional expenditure which would thus be thrust on private parties, the cost of the work to the Corporation would, it turned out, be increased, on the alternative offered, by no less than one million sterling. The route, as suggested, would debouch right on to the southern transept of St. Paul's, so that all north and south bound traffic would have to work its way round the Cathedral, whilst in the original scheme it was afforded a nearly straight lead, past the eastern side of Wren's building, from Great Guildford Street on the south to Goswell Road on the north. The new roadway, as proposed by Mr. Mott, will be 80 ft. wide from its commencement in Southwark Bridge Road up to its termination in Cannon Street, and the widening of St. Paul's Churchyard from the latter point to St. Martin's-le-Grand could be effected, should the London County Council consent, at no inordinate expenditure, since the buildings to be removed here are not of a specially costly character.

In fact, in laying out the scheme the engineer has had in view the facilitating to the utmost the transport of the average citizen between the north and south sides of the Metropolis, whilst the architects are apparently more concerned to meet the desires of the country cousin and sightseer generally. These form, no doubt, a numerous and important class of the community, but altruistic feelings have not yet been developed to such an extent as to render the Londoner ready to face for the benefit of strangers an initial expenditure of one million sterling, to which must be added the steady loss of time, day in and day out, which would arise from the lesser convenience of the architects' suggestions. On this point the testimony of the police has been to the effect that the control of the traffic would be much more easily provided for on the original scheme.

The subject of town planning has, indeed, been very much in the air of late, and the Royal Institute of British Architects has not been the only representative of the architectural profession to suggest an alternative to the Corporation's scheme.

At a meeting of The Society of Architects, held on December 15th last, Mr. G. A. T. Middleton revived a yet more fantastic proposal. His suggestion is briefly that the South-Eastern and Chatham Railway Company should abandon its present river-crossings and construct a new terminus on the south side of the river at Nelson Square, off the Blackfriars Road. The existing viaducts and the stations on the north side of the river at Cannon Street, Charing Cross, St. Paul's, Ludgate Hill, and Holborn, would be turned over to the architect for embellishment, with fine buildings, and thus three new roadways across the Thames would be opened to pedestrian and vehicular traffic. It is very easy to see the advantage of the architect were such a proposal definitely adopted. Indeed, no such opportunity for the exercise of his art has occurred since the destruction wrought by the Great Fire nearly two and a half centuries ago. There would be fine squares, with surrounding buildings, at the present station sites, and the broad viaduct constituting the roadway would, it is hoped, prove as popular to builders as Holborn Viaduct has done. How far the scheme would afford any very substantial relief to existing cross-river traffic is, however, highly problematical. At the present time 110,000 pedestrians and 22,000 vehicles cross London Bridge daily, while the traffic over the Tower Bridge is 12,000 vehicles and 50,000 foot passengers. In the case of London Bridge many of the vehicles are omnibuses, so that perhaps the total passenger traffic may be double the number of pedestrians, or 220,000 in all. In the case of the Tower Bridge, the number of omnibus and cab passengers will probably not very greatly augment the total passenger traffic, which, in round numbers, over the two bridges, is probably under 280,000 per day. Now the three railway bridges which it is proposed to abolish carry across the river 200,000 passengers per day. As in Mr. Middleton's scheme these would still have to find their way across the river, each of the three bridges would by this traffic alone be crowded to fully the same extent as is the Tower Bridge.

The direct cost of the scheme would be very great. The sites to be acquired are very valuable, and could be purchased only at a very high price. Even if the railway company got its own valuation for them, it is far from likely that the transaction would be profitable to it. The establishment of a new terminus at Nelson Square would be exceedingly costly, as the viaduct from the existing lines east of London Bridge Station would have to carry at least four tracks, and perhaps six. Further, season-ticket holders would certainly demand a reduction of at least a couple of pounds per annum in the rates they now pay as an offset against the omnibus and tram fares which would then become a necessity. Moreover, Mr. Middleton's scheme fails to take account of the fact that time is often as important as money. Possibly passengers to Charing Cross might not be much affected in this regard, as the double crossing of the river at Cannon Street is the source of much delay, but the enormous daily influx of City men into the latter station would be greatly inconvenienced by having to spend perhaps an additional half hour daily en route to and from their place of business. It should further be noted that, in addition to passenger traffic, there is now also a heavy goods and coal traffic over the railway bridge at St. Paul's. This would have to find its way south of the river by some more devious route, to the enhancement of freight, which would ultimately fall on the consumer.

Indeed, the proposal seems to embody in concrete form every objection that engineers are inclined to urge against architects' schemes for town improvements.

The whole scheme, in short, is simply of a character to appeal to those with grandiose ideas as to the insignificance of time and money, and the all importance of art.

It has often been suggested that architects and engineers should be associated together in the execution of public works, and much may undoubtedly be urged in favour of such a course. The advance of such schemes as are criticised above seems to show, however, that the difficulty still exists of persuading the architect that the bread-and-butter of utility must have precedence over the meringues of art. This obstacle to such an association of the two professions was made very evident at a joint discussion on town-planning, which took place recently between the members of an engineering and of an architectural society. The members of the latter boldly claimed that in town-planning the predominant position belonged to them, and that, at whatever cost, the engineer must construct his roadways, bridges, and sewers in subordination to what they chose to consider the æsthetics of the problem. So long as such views are maintained useful co-ordination in public works between the engineer and the architect is impossible.

Painters tell us that a knowledge of anatomy is indispensable to good portraiture. The skeleton is not in itself a thing of beauty—save, perhaps, from the utilitarian standpoint—but is the all-essential basis of whatever comeliness may exist outside it. In the execution of public works the engineer's part is to provide this fundamental skeleton, leaving to the architect the work of clothing it with a more or less prepossessing exterior. A defective skeleton is undoubtedly a much more serious matter than an external blemish, however unsightly. Nature, in framing the skeleton, has apparently been guided entirely by utilitarian considerations, and the precedent may well be adopted by those concerned in the planning of towns.

Mr. Middleton in a reply published by *The Engineer*, points out that it was a sketch rather than a fully-developed scheme which he put forward, but there is no necessity whatever for its being an unduly costly proposal to adopt. Certainly the architectural opportunities would be many, and surely that is a point in its favour; but highly desirable as they would be from my point of view, they are not all of them absolutely essential. The tone taken up in the article is far too utilitarian, as if utilitarianism were the only possible consideration in a great city like London; and Mr. Middleton further points out that the scheme would remain much as it is even if the bridges were not rebuilt or architecturally treated. It would even be possible to leave both Cannon Street and Charing Cross Hotels without further alteration than would be involved by carrying railways through the booking offices at the present rail level.

He also considers that the article deals quite unfairly with the figures which are given regarding traffic accommodation. It states that the three railway bridges at present convey 200,000 passengers per day, but as it admits that London Bridge at present conveys some 220,000, surely three road bridges, each much wider than London Bridge, would convey between them many more than the 200,000 passengers now taken by the railway bridges without overcrowding.

As regards the passengers now landed at Cannon Street Station for daily work in the City, it must be admitted that the proposed new station at the south side of Blackfriars Bridge would not be so convenient for them. The answer to this is that no great scheme can ever be carried out without inconvenience to a certain number of people. In the course of a short time, those whose business took them essentially to the City would probably, in almost all instances, move to districts on one of the lines which serve the City. One of the great ideas of the scheme is to develop the south bank of the Thames as a supplement to the City, and undoubtedly many of the passengers now travelling to the City itself would open offices and places of business along the proposed circular road, and in the new business streets which would spring up between it and the river. The readjustment would take a few years to accomplish, but it would surely come, and would, he feels confident, soon

bring an enormous amount of additional traffic to the South-Eastern and Chatham Railway, which would far more than compensate for any temporary loss upon season-ticket rates, owing to a necessary reduction of fares.

He fails entirely to agree that the cost of the scheme would be *very* great, and that the sites to be acquired are *very* valuable, to be purchased only at a *very* high price. The word "very" has here been used so frequently as to suggest that there was a doubt in the writer's mind; and certainly it is justified, for the property to be acquired is of an exceedingly *cheap* character, as London property goes, except for the little piece of road north of Cannon Street, which is rather an addendum to than an integral portion of the scheme itself.

The matter of the coal and goods traffic now passing over the railway bridge at St. Paul's had not escaped his notice, but he doubts if it is so great as is made out. Before the amalgamation of the London, Chatham, and Dover Railway with the South-Eastern Railway there must have been another way round to the Chatham line, and this could doubtless be utilized. If not, he sees little difficulty in leaving two lines of rail between Snow Hill and Nelson Square for goods and through traffic only, while still providing a wide enough road for vehicular and passenger traffic. If any widening had to be done, it would be along a very short distance indeed north of Ludgate Circus, and the expense of this would be justifiable.

On the whole, he believed that his scheme, considered as a sketch, is sound, and that it could be carried out as a great financial success, particularly if the railway companies took it up and dealt with it in a broad-minded manner, not forgetting architectural embellishment as a means of providing attraction, which goes a long way towards the success of anything of the sort.

If engineers complain that architects think too little of financial bases and structural skeleton work, architects have a great deal of just complaint against engineers. In this scheme at least an endeavour has been made to combine the main interests both of engineering and of architecture, but at present it is a sketch only, and probably, so far as the author is personally concerned, it will so remain.

A NOVEL HIGHWAY.—Now that the subjects of town planning and traffic facilities are so much in the air, says the *Local Governmen' Officer*, there is something decidedly bold and attractive in the scheme which Mr. G. A. T. Middleton has unfolded to The Society of Architects. Its scope and comprehensiveness are apparent when we find that it bears upon cross-river communication, re-planning in South London, and extensive railway re-arrangements. Mr. Middleton considers that something more is required than an additional bridge and approaches, this being a reference to the new St. Paul's Bridge, and he mentioned that the need of an extra bridge either at Charing Cross or at the Temple has been mooted. He then alluded

to the declaration of Mr. John Burns, in opening the Town Planning Conference at the Guildhall, to the effect that he would like to see the railway bridges over the Thames removed and any required terminus station placed on the southern side.

But while Mr. Burns seemed to be doubtful of the feasibility of the idea, Mr. Middleton is by no means convinced that it is impracticable, and his solution was set forth in the paper he read to The Society of Architects. A good many years have elapsed since somebody suggested that instead of having several terminus stations scattered over the Metropolis, there should be one great central station to which all the main lines should converge. Few, however, consider the plan practicable, while a good many consider that even if practicable it is not desirable. What Mr. Middleton suggests is something of the same kind, but on a much more modest scale. He would do away with three termini at Cannon Street, Holborn, and Charing Cross, hotels and all, substituting for them one good central terminus on the south side of the river.

Not only would the unsightly railway bridges then disappear, but Mr. Middleton proposes that the loop line from Charing Cross to Cannon Street should be converted into a high level circular road 80 ft. wide, specially adapted for motor traffic. It is argued that, if properly carried out, the undertaking would be profitable, and that the vacant sites would give opportunities for architectural treatment. But there is a large speculative element, especially as tradesmen and business firms fight shy of new thoroughfares even in central London. Who then will take the initiative? We doubt if the railway companies will do so.

Architects' Benevolent Society.

In our issue of April last, we criticised at some length the Annual Report of the Benevolent Society, and made some suggestions for development.

We have little to add except that it would appear from the latest list of subscribers that about three per cent of the members of The Society of Architects are subscribers to the fund, and probably a similar percentage of members of the R.I.B.A.

This confirms our opinion that the Benevolent Society is hopelessly out of touch with the general body of practitioners, and is practically unknown to the profession generally, though it has been in existence for sixty years.

We have the greatest sympathy with the aims of the Benevolent Society, and are aware that with its limited resources it does everything possible to cope with the cases which come before it, but we think the governing body are a little too conservative in their methods, and that the Society would greatly benefit by the introduction of bolder and wider measures of making its work known.

The Society of Architects' Travelling Studentship. Regulations and Conditions, 1911.

Candidates for the Travelling Studentship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscriptions for the current year. (The maximum age limit is 28 years.)

The Competition Drawings, upon which the Studentship will be determined, must be delivered, carriage paid, at the Society's Offices, 28, Bedford Square, London, W.C., not later than 6 p.m. on the first day of May, 1911, without name, motto, or other mark of identification, and must have attached thereto a plain sealed envelope containing the competitor's signature and address appended to a declaration that the drawings are the candidate's unaided work.

The plans will be numbered as received, and a corresponding number will be placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Studentship is of the value of Twenty-five Pounds (£25), and carries with it the Silver Medal of the Society. The holder will be required to undertake, between June 1st and October 1st, a sketching tour of not less than three weeks' duration.

The successful candidate must, within fourteen days after the award, notify the Secretary of the date of the commencement of the tour and its proposed locality, and will then receive the sum of Fifteen Pounds (£15).

A diary of the tour must be submitted with the measured drawings, sketches and notes, all of which must reach the Secretary before October 1st.

Subject to the Council being satisfied with the work executed during the tour, a further payment of Ten Pounds (£10) will be made, and the Silver Medal presented to the candidate at the first Ordinary Meeting of the Session, or some other date to be fixed by the Council.

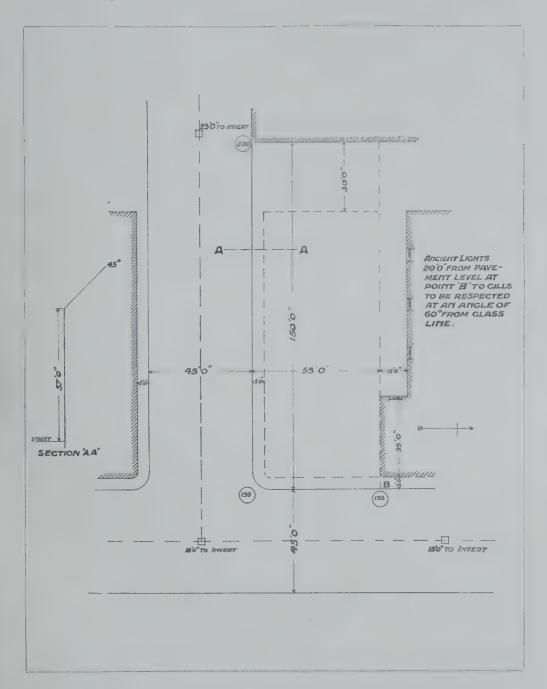
The Council reserve the right to exhibit or reproduce the drawings, and their decision on any matter arising is to be final.

The Studentship may only be held once by the same person.

A candidate who does not adhere to the conditions and instructions in every particular, will be disqualified.

Subject for 1911, A Social Club.

A site plan is given showing the available building space, the adjoining buildings, levels, and other details. Porches, bay-windows and other architectural features may project beyond the building line.



SITE PLAN, AND SECTION SHEWING LIMIT OF HEIGHT OF OUTER WALL.

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Main sewer, gas and water mains, and electric cables are laid in the roads.

The building is to consist of basement, ground, first, second, third and fourth floors, and the following accommodation is to be provided, the disposition of the rooms being left to the competitors.

Main entrance, vestibule, lounge hall, porter's box, telephone, lift to all floors, main and secondary stairs, morning room, writing room, reception room, two billiard rooms (one with two tables), lavatories to all floors, serving lobbies where required, dining room, library, card rooms, committee room, secretary's office, etc., etc.

Trade entrance, kitchen and all necessary offices, servants' hall, plate and strong rooms, stores, staff lavatories.

Housekeeper's rooms, a few bedrooms for members' use, bath rooms, stewards' rooms and staff bedrooms.

The accommodation on the fourth floor may be wholly or partly in the roof.

Fire hydrants on every floor, and adequate means of escape from fire to be provided.

The problem is to provide a building of the most suitable accommodation, on a given site, at the least possible cost, and complying in every respect with local building by-laws.

The materials used and style adopted are left to competitors.

The estimated cost of the building based on the cubical contents must be endorsed on one of the drawings, showing the method adopted and the price allowed.

Drawings required.

Block plan, drawn to a scale of 16 ft. to the inch, showing:-

(a) The position of the buildings; (b) drains, with their falls and depth below ground; (c) entrances; (d) boundary walls or fences and their nature; (e) roads; (f) the points of the compass.

A complete set of working drawings to $\frac{1}{8}$ in. scale, comprising plans of each floor internal fittings to be shown, and drainage and heating. Elevations of each front and at least three sections, two cross and one longitudinal, and at least one sheet of details including a half-inch detail of part of the main front. Perspective sketch optional.

The drawings are to be of such a character as would be required by a contractor to carry out the work, and are to be executed on white paper, imperial size, mounted on strainers or millboard. They must be inked in and not left in pencil.

Enquiries.

Any points raised by competitors up to February 20th will be dealt with and replied to in the next ensuing issue of the *Journal*.

Architectural Scholarship, 1911. New Regulations.

The Scholarship is for the future to be awarded for Measured Drawings, and Competition is confined to Students of the Society, who are under 23 years of age on the latest day fixed for the delivery of the drawings, viz., September 30th, in any year.

Conditions and Subject.

Candidates for the Architectural Scholarship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscription for the current year. The maximum age limit is 23 years on September 30th, 1911.

Candidates are required to submit at least three and not more than four sheets of Measured Drawings and Details, of some building of historic interest.

The Drawings are to be prepared between January and September, 1911, and are to be executed on imperial size paper, and delivered carriage paid at the Society's Offices, 28, Bedford Square, London, W.C., on or before September 30th, 1911, together with the original sketches and notes.

The Drawings must be without name, motto, or other mark of identification, and must have attached thereto a plan sealed envelope containing the Competitor's signature and address appended to a declaration that the Drawings, etc., are the candidate's unaided work.

The Drawings need not be mounted, but they must be delivered flat and not rolled.

The Scholarship is of the value of £10, and will be disbursed by the Council on behalf of the holder.

The award will be made by the Council subject to their approval of the manner in which the Candidate proposes to utilize the Scholarship, or alternatively to the Candidate agreeing to such scheme as the Council may decide upon.

Should the scheme not call for the payment of so much as Ten Pounds (£10), the holder may receive the value of the balance in books or instruments.

The successful Candidate may be required, before the award is confirmed, to produce to the Council evidence as to age.

The Drawings will be numbered as received, and a corresponding number placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Council reserve the right to exhibit or reproduce the drawings, and their decision on any matter arising, is to be final.

The Scholarship may only be held once by the same person.

A candidate who does not adhere to the conditions in every particular, will be disqualified.

Papers for Session 1910-11.

The following arrangements have been made for the Session.

1911

January 12th, Ordinary Meeting and Students' Social Evening.

The Turned Lattice Work of Egypt. By Col. F. S. Leslie, R.E. (Hon. Sec.) February 9th.

The Relation of Sculpture and Carved Ornament to Architecture. By Mr. W. S. Frith. March 9th.

English Furniture. By Mr. Percy Macquoid, R.I. April 6th.

Hospitals. By Mr. A. Saxon Snell, F.R.I.B.A; May 11th.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the Journal as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the Journal known as a useful medium between the producer and the consumer.

Ordinary Meeting.

The third Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday January 12th, 1911.

Agenda :-

8 p.m.

- 1. The President to take the chair.
- 2. Minutes of the last Ordinary Meeting.
- 3. Nominations for Membership.
- 4. Ballot for candidates for Membership and Studentship.

8.15 p.m. Student Meeting for Election of Committee and Officers.

8.45 p.m. Students' Social. Exhibition of Drawings, Smoking Concert. Light Refreshments.

> Open to Members and Students and their friends. Morning Dress. It is not anticipated that ladies will be present.

THE

Journal

OF

The Society of Architects

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New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

A Code of Ethics.

The following is the Code of Ethics adopted by the Association of Transvaal Architects: (1) No member should have any financial interest in or combine any other business with that of architecture, such as building, contracting, house and estate agency, auctioneering, or mercantile pursuits, (2) No member should receive directly or indirectly any royalty, gratuity, or commission on any patented or protected article used on work that is being carried out for his clients without the authority of such clients. He should be at liberty, however, to issue certificates or recommendations for payment for such goods by his clients. (3) No member should participate in or be the medium of payments made on his clients' behalf to any builder, contractor, or business firm without the authority of his clients. He may, however, issue certificates or recommendations for payment for same by his clients. (4) No member should guarantee an estimate or contract by personal bond, nor be a party to a contract with a contractor, except as direct employer or under special circumstances with the concurrence of his client and the contractor. (5) No member should attempt to supplant or compete against another architect after definite steps have been taken towards his employment. (6) No member should advertise in any publication or in any other way than by a card or plate, giving name, address and profession. It is undesirable to do so on boards or hoardings on buildings in course of construction. (7) No member should criticise in public print the professional conduct or work of another architect except over his own name. (8) No member should furnish designs in competition for private or public work except under

conditions previously approved by the council of this or other recognized institute. (9) No member should submit drawings in competition unless designed and prepared under his personal supervision, nor should any member attempt to secure work for which a competition remains undecided. (10) No member should deviate from the rules of practice and scale of charges authorized by a recognized institute without first consulting the president or council of such institute.

The Society of Architects.

An Innovation.

A new departure, so far as the Society is concerned, was made on Thursday evening, January 12th, when only formal business was taken at the Ordinary Meeting, and the remainder of the time devoted to social intercourse and music.

The object of the gathering was to give Members and Students an opportunity of meeting together on a more friendly and informal footing than is possible under the usual circumstances, and that the Council's experiment was fully justified, was shown by the way in which the members and their friends took advantage of the invitation.

The President, Mr. Geo. E. Bond, in his genial way, contrived to combine in his brief address (directed more particularly to the Students), both instruction and humour, and his remarks were received with every indication of appreciation.

Round the walls of the Reception Rooms and other parts of the building were exhibited measured drawings, sketches, water colours and photographs, the work of Col. F. S. Leslie, R.E., Hon. Secretary, Mr. B. R. Tucker, Mr. F. M. Cashmore, Mr. Frank Hearne, Mr. H. Y. Margary, Mr. S. R. Smith, Mr. A. B. Dury, Mr. A. F. Davies, Mr. F. R. Catling, Mr. J. T. Westbye, Mr. E. J. Williams, Mr. Alex. D. Stewart, Mr. H. Phayre, D. Cooper, F. W. Beech, H. Savage, R. Hardy Syms and W. J. Kieffer.

Light refreshments were provided and smoking was permitted.

A feature of the evening was the very excellent programme of music arranged by Mr. R. Willock, F.R.I.B.A., to which the following artistes contributed, Miss Hilda Campbell, Miss Dorothy Eales, Mr. Harry Jackson and Mr. Craig, whose efforts, mostly in lighter vein as became the occasion, were rewarded with hearty applause and encores.

During the evening, the Chairman extended a welcome to the visitors, and Mr. Max Clarke, F.R.I.B.A., in responding referred with satisfaction to the arrangements made for the deliberations of representatives of the R.I.B.A., and the Society on Registration, which he hoped would result in great benefit to the profession.

Proceedings.

HE Third Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, January 12th, 1911, at 8.0 p.m.

The President, Mr. Geo. E. Bond, J.P., having taken the Chair, the minutes of the previous Meeting, as printed in the *Journal* were taken as read, and were confirmed and signed.

Four nominations for Membership were announced.

The Ballot was then taken and the following Candidates were declared to be duly elected:—

As an Hon. Member:

SAYE & SELE. THE RT. HON, LORD, Old Southcote Lodge, Reading.

As Members:

Ashby. Chas. Reginald Howard, Cover. Henry Tribe, Evans. George Llewellyn, Newman. Chas. James, Oliver, Ernest Keene, Oxley. Wilfred Benjamin, Rider. Harry Edwin, Ward. Edmund John,

34 & 35, Norfolk Street, Strand, W.C.
40, Clifford Road, Finchley, N.
29, Bridge Avenue Mansions, Hammersmith, W.
41 & 43, Regent Street, Rugby.
16, Green Park, and 5, Devonshire Place, Bath.
The Crossways, Winchester Avenue, Leicester.
International Buildings, Kingsway, W.C.
34 & 35, Norfolk Street, Strand, W.C.

As Students:

BEACH. THOMAS STANLEY, KINGSTON. GEORGE WILFRED, PINFOLD. STANLEY, REYNOLDS. LEONARD ARTHUR, Carlton House, Halesowen. The Maylands, Stapeley Nantwich. Heyward House, Prince of Wales Road, N.W. Bat House, Newington, Hull.

The proceedings then terminated.

Students' Section.

A Meeting of Students of The Society of Architects was held at 28, Bedford Square, W.C., on Thursday, January 12th, 1911, at 8.15 p.m., for the purpose of electing the Officers and Committee for the Session.

Mr. Geo. E. Bond, J.P., President, was in the Chair. The following were then elected:—Chairman, H. V. Milnes Emerson, A.R.I.B.A. (*Member of Council*); Hon. Secretary, C. H. Hudson; Committee: A. T. Davies; W. Kaula, A.R.I.B.A.; S. R. Smith; E. F. Hubert; H. A. Wilkinson.

MR. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), in proposing a hearty vote of thanks to the retiring Honorary Secretary of the Students' Section (Mr. H. Y. Margary), said that unfortunately for the Students, Mr. Margary had reached the limit of age. He had been a most useful Hon. Secretary, and during the two years he had held the office there had been a considerable amount of fresh work done, particularly in the organization of the Saturday Afternoon Outings, and negotiations

Proceedings.

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in connection with the development of the Students' Section. In Mr. Hudson he was glad to feel they would find a good successor.

MR. B. R. Tucker, as late Chairman of the Students' Section, endorsed all that Mr. Middleton had said. The Outings had always been systematically arranged, and much appreciated by those who attended. He regretted with Mr. Middleton that they could no longer retain the services of Mr. Margary as Hon. Secretary of the Students' Section.

The vote of thanks was carried unanimously, and Mr. Margary in reply said that anything he could do in the interests of the Students' Section would certainly be done by him.

THE PRESIDENT in an address to the Students said, that as a practitioner of long' and very varied experience perhaps he might be permitted to offer them some practical He entered upon the task with some diffidence, recognizing the artistic qualifications of many of their junior brethren, as evidenced by the drawings and sketches submitted in the various competitions during the past four or five years, some of them being on exhibition in the room at that moment. He did not, however, intend to touch upon the artistic side of the question further than to say that the artistic sense ought to be possessed by every architect. At the same time there was another sense of equal moment and requiring much cultivation; he referred to sound, practical, common sense, and he purposed pointing out the advantages to be derived both by the architect and his client from the possession of the latter qualification, presuming of course that the young architect possessed all the other qualifications usually decided by examinations. He may, possibly, make a hit by securing some important public building in open competition, but such occurrences were very rare. In the vast majority of cases the young architect had to commence practice with small work and advance up the hill leading to success by slow and very short steps, and he could assure them that the best staff to lean upon while negotiating that difficult slope was the staff of practical common sense. Immediately a young architect received his first instructions from a client his foot was on the slope of the hill, and it then depended entirely upon himself whether the job was about to enable him to rise a step higher or whether through it he was going to slip back to the old level. He asked them to consider for a few moments how two young architects of different temperaments would act in precisely similar circumstances. As an example of a not uncommon type, he would take the case of Mr. Claude Augustus Splash, a young gentleman, who had, by dint of a good memory and possibly assisted by a liberal use of vaseline, just slipped through the more technical parts of his exam nations. He commences to practise in his native town from which he has been absent some six or seven years. His fond, and of course admiring mother, hearing that Mr. Miggles, the family grocer, has just purchased a quarter of an acre of ground, and is about to build thereon a villa for himself, interests herself in the matter with the result that Claude Augustus submits a portfolio of post impressionist sketches in

colour, in the production of which he is a past master. This leads to a subsequent interview with Mr. and Mrs. Miggles, and after they have explained to him that they are prepared to spend, say £1,500 on the house, they give him some idea of their requirements which include of course, drawing room, dining room, study, five bedrooms, kitchen, scullery, and the usual offices. Now Claude Augustus immediately took exception to such common requirements and suggested to them that as they were evidently not fully acquainted with modern social necessities they had far better leave the matter entirely in his hands, and he pointed out to them that a lounge hall was considered absolutely essential by all the best people, and that he felt sure that they would find it of far greater service than an ordinary drawing room. Mrs. Miggles being very much impressed by this argument as she had social ambitions, the result is that Claude Augustus prepares the plans, obtains tenders, a tender is accepted, the contract signed and the work proceeds. Unfortunately, during its progress a great many alterations are found to be necessary, some of them in order to make the house constructionally sound, others to provide the required accommodation in somewhat more convenient positions. A bill of £500 is incurred for extras, and of course Mr. Miggles grumbles very much about having to pay this large sum. Incidentally, Claude Augustus obtains his usual 5% commission upon the extra amount, and he further has the satisfaction of knowing that he has produced a house, which the conventionally cultured few in the district who are able to appreciate the style, admit to be a distinct ornament to the neighbourhood. Now, the fact that the Miggles's had been able to leave their apartments over the shop and take up their residence in such an apparently desirable house, was a source of envy to the wives of a great many other tradesmen in the town, more particularly to Mrs. Two-three, the wife of the gentleman who had supplied the Splash family for a great many years with drapery and millinery; nor was this lady satisfied until she had persuaded her husband to consider the question of building a house for himself equal if not superior to that of Miggles. With this object in view, she desired to look over the house of Miggles, and she took the earliest opportunity of calling upon Mrs, Miggles, who had previously intimated in the usual way that she was at home on the second Wednesday. Arriving at the gate of Miggles's, she walked up the gravel path, ascended three steps to the door, knocked with a beautiful gunmetal knocker on the bright apple-green door, and was admitted into a small vestibule. Turning to the right she nearly fell down the three steps into the Lounge Hall where Mrs. Miggles and many of her friends and neighbours were discussing tea and the merits and demerits of the new house. As she entered, Mrs. Miggles, with tears in her eyes, was just saying "Perhaps Mr. Splash may be an artist, but in my opinion . he hasn't an atom of common sense." It will not be here necessary to enumerate the defects complained of by Mrs. Miggles, because their nature may be gathered from the instructions subsequently given by Mrs. Two-three to Mr. John Brown, another young architect who had successfully passed

his examination, opened offices and put up his brass plate in the same town. But, he would here say that Claude Augustus from that day to this has never been able to quite understand why the Two-three's failed to retain his valuable services in the preparation of designs for their house, when at the same time they might have retained the valuable custom of the Splashes. Mr. John Brown by appointment, met Mr. and Mrs. Two-three, and received instructions for the preparation of plans for a house somewhat similar to the instructions Mr. and Mrs. Miggles had given to Mr. Splash, but after explaining the nature and extent of their requirements, Mrs. Two-three then, reading from notes she had taken during her interview with Mrs. Miggles, told him of a lot of things they did *not* want and they ran somewhat as follows:—

"We do not want a lounge hall full of draughts—one end open to the vestibule and the other to the rest of the house. Nor do we want an ingle-nook fitted with an open dog-grate which cannot be used because it fills the house with smoke. We do not want odd steps in all sorts of unexpected places about the house. Keep all your ground floors on one level, as we consider it to be extremely objectionable to go up three or four steps out of the kitchen into the scullery. Do not crowd your staircase into a corner where all the steps have to be three-cornered ones, and do not put a balustrade of what you call fret-work—painted white—which will take the housemaid two hours every morning to keep free from dust. Do not slope your ceiling and fit a valley rafter immediately over the head of the staircase, compelling one to dodge closely round the top newel. Do not put your kitchen range immediately behind the door so that when the cook is attending to the oven and the door is opened unexpectedly she is pushed into the fire. Do not put a water closet in the front vestibule where it cannot be used except when the front door is shut. Do not arrange your bedrooms so that the only possible place for the bed is in the corner. Do not put your larder immediately behind the kitchen fire-place with the window opening due south. Do not arrange your bath-room over the front vestibule with the sloping ceiling inside where one is compelled to creep in and out of the bath, and where you have to draw off a bath full of cold water before any hot can be obtained. And so on for about another ten minutes."

Now Mr. John Brown being endowed with common sense at once determined that he would try to fulfil all the wishes of his client. He recognized the fact that as an expert adviser called in to assist his client in spending a comparatively large sum of money it was his duty to spend that money to the best advantage, and to arrange the house comfortably and conveniently with every part fitted for its particular and special purpose.

He recognized the fact that modern medical science tells us that God's light, air and sunshine are essential to health. He also remembered that modern science has advanced far in the design and construction of efficient and economical stoves. He remembered that if he put his bathroom over the kitchen or over the scullery a quick

service of hot water could be obtained at the least possible cost, with the further advantage that in case of accident by frost the damage would be confined to a small and unimportant area of the house, instead of over the better and more elaborately decorated rooms. He paid great attention to the position of the fire-places and the doors and windows all through the house, and it was only when he had advanced thus far that he seriously considered the preparation of his elevations, which as a consequence sprang naturally into being and had a pleasing appearance. By careful thought in preparing his specifications, and close and constant attention to details and the supervision of the work, he was able to build the house without any serious amount of extras.

Of course he was not like Claude Augustus. He missed his opportunity of getting his commission on the extra £500, but he had the satisfaction of knowing that he had thoroughly pleased his client, and at the same time earned for himself the reputation of being a level-headed, reasonable, and sensible fellow, recommendations which led in the immediate future to a lot more work for the friends of both Mrs. Two-three and Mrs. Miggles, all of which, bear in mind, Mr. Augustus Splash who was the first in the field, might have obtained, had he but possessed sufficient common sense to imagine it to be possible that a client knew what he wanted himself, and if he had studied the internal convenience of the house instead of concentrating the whole of his energies on the production of, shall we say, a freak elevation which pleased comparatively few people, and was principally a monument to himself. He seriously advised students to take advantage of their early opportunities. The first time they had work of importance to perform, the first time they had a house to build, be careful to make that house as comfortable and convenient as possible. Let them consider that the first object of a house was the comfort and convenience of its inmates; its appearance being a comparatively secondary consideration, because it was essential to satisfy their first client. Architecture was different to other callings or professions in that respect. An artist may paint a picture that was a failure—he could smear it out. The early mistakes of a solicitor or a barrister may be forgotten; the failures of a medical man may be buried, but the work of an architect remained as a monument to his success or to his failure for his lifetime. If the work was a success it stood there as a constant recommendation to people to employ him; if it was a failure it still stood there as a constant warning to people to have nothing to do with him. He asked them seriously to consider these few points.

Mr. J. T. Westbye (Student), on behalf of the Students, thanked the President for his remarks, and said that it was not the first occasion he had had the pleasure of listening to the advice of their popular President. He thought that in speaking of Mr. John Brown, Mr. Bond was possibly relating his own early experiences. The President had during his term of office, encouraged the Students in every possible way, and their hearty thanks were due to him for his efforts.

Col. F. S. Leslie, R.E. (Hon. Secretary), addressed a few words of welcome to the Visitors, and Mr. MAX CLARKE, F.R.I.B.A., in reply said he had spent the whole afternoon in assisting the Council of the Royal Institute to judge competitions, and it was quite a pleasure to come and see some of the work of the Students of The Society of Architects. Most of them knew that it was rather an agitated season for architects. They were all anticipating events which they hoped would come to fruition sooner or later. It would be extremely advisable if the Society and the Institute could meet in a spirit of moderation and reconcile their differences so as to bring about that which would be of very great service to the whole profession. There was no doubt that the architectural profession lacked means or method by which they could be brought to a more exalted status. Mr. Augustus Splash was a very good example of the gentleman they did not want. He was one of those people who brought them more or less into disrepute. It should be the object of every architect to recollect that he was employed to spend his client's money, and his first object should be to spend that money in the way that his client desired, and not in the way that he desired. He, therefore, commended to their most careful consideration the remarks which their President had made. Architects were too fond of forgetting that they were the servants of the public, without whom they could not even exist. It would give him the greatest pleasure if the gentlemen who were to meet together shortly, could settle upon some method of dealing with the matter which had been the primary object of the Society's existence. If it could be satisfactorily carried through it would be a very great credit to the Society who were the originators of the scheme, and it would certainly be of the greatest benefit to them all. He thanked them for permitting him to be present, and hoped that very shortly they would all be on one platform.

MR. HERBERT FREYBERG, F.S.I. (Member), proposed a very hearty vote of thanks to the President for his address, and for the able and enthusiastic way in which he had occupied the Chair. He had, in his address, combined amusement with instruction, and, although, it was necessary to possess common sense, a certain amount of enthusiasm was also required, and of the latter quality their President had more than his full share. It was in consequence of the President's enthusiasm that they had had such a successful evening.

The proposition was seconded by Mr. C. L. R. Tudor (Member), and was carried with acclamation, and accorded musical honours.

The President in reply said he had thoroughly enjoyed the proceedings which he thought had been most successful. With regard to his remarks, some of them might have thought that Mr. Augustus Splash and the defects he had mentioned were exaggerations, but he assured them that he had met with them in actual practice during the last three or four years, and he was sorry to say that the worst mistakes were in some cases made by young architects who had passed the highest professional examinations.

The Standing Committees, 1910-11.

The Council have appointed the following Standing Committees for the Session 1910-11:—

The President and Vice-Presidents are ex-officio members of all Committees.

LITERATURE.—E. J. Partridge, F.S.I. (Chairman); R. G. Bare (Past Hon. Librarian); H. V. M. Emerson, A.R.I.B.A.; Col. F. S. Leslie, R.E. (Past Vice-President, Hon. Secretary); R. G. Lovell; C. H. Mead, M.R.SAN.INST. (Hon. Librarian); G. A. T. Middleton, A.R.I.B.A. (Past Vice President); J. Herbert Pearson; E. J. Sadgrove, F.R.I.B.A. (Hon. Treasurer); B. R. Tucker, M.R.SAN.INST. (Past Hon. Treasurer).

Examination.—Professor Henry Adams, M.Inst.C.E. (Chairman); H. V. M. Emerson. A.R.I.B.A.; E. M. Leest, J.P.; Col. F. S. Leslie, R.E. (Past Vice-President, Hon. Secretary); C. H. Mead, M.R.SAN.INST. (Hon. Librarian); E. C. P. Monson, F.R.I.B.A.; E. J. Partridge, F.S.I.; E. J. Sadgrove, F.R.I.B.A. (Hon. Treasurer); W. A. Scott, A.R.I.B.A., A.R.H.A.; R. Willock, F.R.I.B.A.

GENERAL PURPOSES.—E. J. Partridge, F.S.I. (Chairman); the President, Vice-President, Honorary Officers, and Chairman of Committees.

Finance.—B. R. Tucker, M.R.SAN.INST. (Chairman); R. G. Bare (Past Hon. Librarian); G. A. Birkenhead; R. Cecil Davies; T. S. Inglis; R. A. Jack; C. E. Jackson; Col. F. S. Leslie, R.E. (Past Vice-President, Hon. Secretary); R. G. Lovell; E. C. P. Monson, F.R.I.B.A.; E. J. Partridge, F.S.I.; E. J. Sadgrove, F.R.I.B.A. (Hon. Treasurer).

Practice.—E. C. P. Monson, F.R.I.B.A. (Chairman); R. G. Bare (Past Hon. Librarian; G. A. Birkenhead; B. D. Cancellor; R. Cecil Davies; W. Scott-Deakin, F.R.I.B.A.; T. S. Inglis; R. A. Jack; C. E. Jackson; E. M. Leest, J.P.; Col. F. S. Leslie, R.E. (Past Vice-President, Hon. Secretary); G. A. T. Middleton, A.R.I.B.A. (Past Vice-President); E. J. Partridge, F.S.I.; J. Herbert Pearson; E. J. Sadgrove, F.R.I.B.A. (Hon. Treasurer); R. Willock, F.R.I.B.A.

REGISTRATION.—G. E. Bond, J.P., *President (Ex-officio Chairman)*; every member of the Council for the time being; the following members of the original Architects' Registration Bill Committee: His Honour Judge Emden; G. A. T. Middleton, A.R.I.B.A. (*Past Vice-President*); J. F. McMullen, J.P. (*Member*): W. Gillbee-Scott, F.R.I.B.A., and Mr. Ellis Marsland (*Past Hon. Secretary*).

STUDENTS' SECTION.—The following have been elected by the Students:—
H. V. M. Emerson, A.R.I.B.A., Member of Council (*Chairman*); A. T. Davies;
N. G. Harland; E. F. Hubert; C. H. Hudson (*Hon. Secretary*); W. Kaula, A.R.I.B.A.;
J. R. Leathart; S. R. Smith and H. A. Wilkinson,

Art and Registration.*

By H. GUICHARDE TODD, F.S.A. (Scot.), M.S.A.

HE future of art in architecture and the professional welfare of its exponents is to a great extent in the hands of the present generation, and two policies are put forward for consideration as ameliorations of the present unsatisfactory state of affairs in art and professional practice.

The Registration of Architects, as has been proved by several plebiscites, is supported by the great majority of architects, and Architectural Copyright is brought forward by a section which professes to study more particularly the future of our art while protecting the interests of professional men. These policies may appear, at first sight, to be very similar and leading towards the same end, but a closer study of their probable effects in practice, and more particularly on art, is worthy of consideration.

It has been said that Registration will limit the liberty of the architect, and be opposed to the welfare of art, but this contention does not appear to be well founded. Sir James Mackintosh, the eminent lawyer and essayist of the earlier portion of the last century, said, "The description of liberty which seems to me the most comprehensive is that of security against wrong. Liberty is therefore the object of all government." The Registration of Architects means the ultimate government of the profession by the profession to ensure security against wrong, but it is not only in the personal protection of the Members of the Profession that the Policy of Registration is worthy of consideration, and the probable effects of such a policy on art must be studied.

Art in architecture is acknowledged by the majority of our most prominent architects to be in a very unsatisfactory state, and the introduction of an Architectural Copyright Bill, at first sight, appears to be a necessary measure for the protection of the personal property and standing of the architect, but a reference (at the risk of being personal), to the published opinions of some of our leading architects on the present state of architectural art may be helpful.

The symposium on architecture, recently conducted in *The New Age*, by Mr. Huntley Carter, is a valuable collections of opinions which should be of great interest to all architects and artists who look at architecture and art widely, and more particularly to those who, through Registration, hope to see the mistress art take a proper place in our social life. The opinions of the eminent contributors to this symposium show a general despondency as regards the progress of our art, and Mr. Mervyn E. Macartney, F.S.A., F.R.I.B.A., and Mr. Edward Warren, F.S.A., F.R.I.B.A., who contribute interesting articles, are both of the opinion that the present unsatisfactory state of art and architecture is due to the ignorance and apathy of the public.

^{*}Summary of a paper read before the Guild of Architects' Assistants.

Mr. Macartney says, "Little more can be done by architects themselves until the public expresses some sort of approbation," and also "In London we accept all kinds of vulgar fripperies from stockbrokers turned architects."

Does it not follow that the public very naturally expresses little approbation of the vulgar fripperies of stockbroker architects, and does it not also follow that if "architects themselves" confine the energies of stockbrokers to stockbroking, art and architecture will benefit, and the public express some kind of approbation for the works of a profession which is a definite profession?

Mr. Macartney further says, "It would, however, have to be conceded at the outset that the general taste in this, the mistress art, is at a lower ebb than at any time even of the 18th century," and, "In England up to the middle of the 18th century, taste in architecture was fairly general. Every gentleman understood its principles, and several of them were not without ability in its practice." So that in this, the 20th century, although we know that "the mistress art is at a lower ebb than at any time even of the 18th century," we have stockbrokers, auctioneers and certificated bailiffs, as exponents of the mistress art, and supplying "all kinds of vulgar fripperies" acceptable to the greatest city in the world, and this in place of the favourable atmosphere which existed in the first half of the 18th century.

No true architect, whose desire is the welfare of his art, objects to a stockbroker, auctioneer or bailiff becoming an architect, provided that the gentleman is qualified by nature and attainments to practise the profession in keeping with the canons of art and professional etiquette, but every architect with a soul above the mere utilitarian routine of business must object to the unnecessary degradation of architecture by the works of the individuals who have given our streets their vulgar fripperies in such profusion.

The Registration of Architects would not necessarily make every building in our streets a work of art, but it would undoubtedly, in future years, prevent the utterly unqualified and ignorant man from practising as an architect. Mr. Macartney truly says, "A tradition in architecture cannot be built up in a day," but, as public approbation is necessary to the progress of tradition, it is reasonable to expect that by gaining public approbation and notice through a non-controversial Registration Bill approved by the public through their elected representatives in Parliament, that further public approbation, understanding and appreciation of the profession and its aims would follow.

The Apathy of the Public.

The present position points out not only the apathy or indifference of the public, which is merely a negative evil, but the positive and regrettable fact that they do not take architecture seriously or acknowledge its importance, and so long as it is possible for stockbrokers to openly violate the laws of good building, the public

either never will take architecture seriously and acknowledge its association with art or such a happy eventuality will be postponed to an absurdly indefinite futurity.

Mr. Macartney says, "It is only the great gullible public who think that painters alone are capable of producing art, so they muddle along, and when they want a bit of 'art' they buy it from the painter. The assumption that painters can do architecture is doubtless based on this feeling that 'art' may be obtained in sample and applied to building—a square foot or a yard at the time."

In the first place, it is obviously the duty of architects to see that the public are not gulled, and even before "the public expresses some sort of approbation" it is possible for "architects themselves" to do much towards gaining that approbation. It is also due to the art of architecture from its exponents that approbation should be gained, and as in politics measures are supported because of the sincerity and through the personalties of their originators and supporters, so must public approbation of architecture be gained by sincerity and whole-hearted and businesslike action by its practitioners, and by keeping the importance of architecture continually in the public eye.

Art and Advertisement.

Architects may not advertise for their own personal benefit, but architects as a body can surely advertise the importance of their art by drawing public attention to it on every possible occasion. The Town Planning Conference has done much to convince the public of the importance of the architectural profession, but it must be remembered that the subject of Town Planning owes its present prominence very largely to the fact that it has been brought to the public notice through political channels, the Town Planning Bill having been commented on by every journal of importance and the subject having all the prominence of a political measure.

It is obvious that the introduction of a Bill for the Registration of Architects would also attract notice and convince a large proportion of the general public of the importance of the architectural profession.

The public apathy which Mr. Macartney and Mr. Warren deplore may be in some measure due to the fact that there is no obvious care of the public interest taken by architects as a profession. The public looks after its own interests through local by-laws and surveyors, whose functions are supervisory of the architect's work, and, although, this is necessary and probably always will be necessary, it has a tendency to an antagonistic feeling which is regrettable and might be somewhat relieved.

The Use of Diplomas.

In the medical profession, the Diploma of Public Health (D.P.H.), held by so many doctors has convinced the public that Public Health is made a serious study by medical men; the profession is looked up to, and the public interests in that sphere are felt to be safe in its hands,

The institution of a Diploma in Civil Architecture might well fill a corresponding place in the architectural profession, and have the same effect, in convincing the public that architects are solicitous for their well-being by endeavouring to give them artistic and suitable as well as sanitary and well-built buildings, but such a Diploma could be of little use so long as the professions of stockbroking and architecture are interchangeable.

The haphazard, happy-go-lucky methods of the past century, have proved unsatisfactory, art in architecture is in a chaotic state, and to the apathy of the architectural profession, as much as to the apathy of the public, is this chaos due, and as the architectural profession awakens to its responsibilities as curator of the mistress art, so will the public awaken to appreciation of the profession and the art it represents.

Public Appreciation Necessary.

Public approbation is necessary to the progress of art, but the public cannot be forced to appreciate art and architecture, therefore, it must be led to that appreciation, and the first step likely to convince at least a large section of the public of the importance of architecture would be the initiation of the Policy of Registration, and the consequent access of dignity and standing in the public eye which that measure would confer on the members of the profession.

The benefits of such a consummation are obvious and would be two-fold, beneficial to the profession and to the public; for the interests of the public, the profession and the art which it professes are inseparable. The public would be safeguarded against the practice of irresponsible or altogether ignorant practitioners. Architects would have a professional standing to lose, and if this were once appreciated by the public, the importance of good architectural work would be recognized.

Architecture a Responsible Calling.

In the artistic sense as well as the professional sense the practice of architecture is a most responsible calling. Architecture is art as expressed everywhere, it is not hidden away in museums or galleries, but meets us at every turn; it is part of our daily life, and should only be in the hands of responsible exponents, responsible for the safety as well as the suitability of their buildings.

It would be mere folly to assert that Registration could do more than regulate the first artistic studies of intending architects. Registration could never force the architect to work in keeping with the best dictates of the canons of art, to build in proportion to the necessities of the case, apply his ornament to the best advantage and restrain his vulgarity or that of his client.

In short, laws which may be made to govern professional practice, while tending to raise the profession and its work generally, could never synchronise with the laws of nature and the canons of art which are subservient only to the laws of nature;

but, under a wise measure of Registration every candidate for the practice of architecture would undergo some approved training, or give proofs of some artistic study in addition to the utilitarian necessities of that professional knowledge necessary for the practice of architecture in the best interests of client and public.

Unprofessional Conduct.

The responsible architect, in keeping with the definition of security already given, can only be the architect who has something to lose, and under Registration that would be his professional standing. At the present moment any architect guilty of unprofessional conduct, however gross, provided he keeps within the limits of the law, would only lose his standing in the eyes of his professional brethren, and could not be prevented from describing himself as an architect and a member of an honourable profession, and training pupils to any number; but under Registration, as generally understood, any such person found guilty of serious professional malpractice would no longer be able to describe himself as an architect or recover professional fees at law.

The Registration of Architects would make it possible to obtain reliable statistics regarding the profession and all matters concerning it, and as an executive force the local influence of the provincial societies would be most valuable, as under a wise measure of Registration, their standing would be enhanced by their official connection as educational bodies with the central authority, and through the whole of this land, societies working in the interests of art and architecture would be supervised to some extent by a Central Body possibly similar to the Central Council suggested in the Architects' Registration Bill.

The Central Council hitherto provided for in that Bill would consist of architects of the highest standing, elected to represent the various existing architectural bodies, Metropolitan and Provincial, in numbers proportionate to the importance of the bodies which they represented, and inclusive of representatives of architects qualified for Registration who are unattached to any professional society.

This Council would administer the code of ethics of the profession, and it is hard to imagine how such an arrangement could be prejudicial to art in architecture.

Architectural Copyright.

In addition to this comprehensive policy, a Bill to protect Architectural Copyright is proposed, a Bill which should be of great interest to the profession generally, because the promoters of this policy are prepared to hand over, quite unnecessarily, the management of purely professional matters to members of the legal profession who can hardly be judges of what constitutes originality in architectural design.

It is amusing to find that the first great proposal for many years, professedly in the interests of architects should be so obviously in the interests of the legal profession, and such a Gilbertian position can only bring ridicule on architects and give the public cause to believe that architects cannot manage their own affairs. Under Registration, the names of practitioners guilty of the malpractice of unjustifiably copying plans or elevations to the detriment of their professional brethren could be removed from the Registration list, and this action would be a parallel to being struck off the rolls in the legal and medical professions. Lawyers and medical men have wisely kept the management of their own affairs in their own hands, and it cannot be said that it presses unfairly on the members of these professions, as only in the case of aggravated malpractice is the power of ejection exercised.

An Architectural Bench and Bar.

As architects can be the only judges of what constitutes infringement of architectural design, the elevation of some eminent architect to the Bench to deal with all cases under the Architectural Copyright Act would appear to be necessary, in conjunction with an arrangement whereby architects might take silk and plead at the Architectural Bar on matters of art. This may appear to be merely fantastic, but, given an Architectural Copyright Bill to protect originality in art in architecture, it appears to be a logical necessity.

This Bill has sprung from a circle which may be taken as antagonistic to Registration as generally understood, and which furthermore professes to have the well-being of our art in its keeping. These promoters wish for better buildings and more of them, and yet, they will allow the stockbroker-architect to perpetrate his atrocities, and supply his vulgar fripperies without allowing him to take the inspiration he so badly requires from contemporary buildings which are tending towards the evolution of a national style.

Under these circumstances their vulgarity can only become more vulgar and the benefit to art can hardly be seen.

An Architectural Copyright Bill in conjunction with an Architects' Registration Bill is more attractive, but Architectural Copyright under existing conditions does not appear to be in the best interests of architectural progress.

Registration on the other hand, would appear to tend towards architectural progress. Mr. Reginald Blomfield, A.R.A., in his contribution to the Symposium already mentioned, says that "only a trained architect can be an architect," and as under Registration in the next generation, all architects would undergo some approved training, and their pupils would be also trained, it follows that a profession trained to some extent would be the result.

Registration could not produce genius, or even tend towards the production of genius, but it would tend towards a reduction of the utterly bad works of architectural art, while it would not in any way hamper the practice of gentlemen who are specially qualified to produce works of outstanding merit and originality. An objection which

is sometimes taken to the policy of Registration is, that it would debar such persons as discover late in life that they had a natural aptitude for architecture from practising and thus the world of art might lose the services of persons particularly qualified for the practice of architecture. This is somewhat of a fallacy, as proficiency in architectural design is not so much inborn originality as that originality which is the outcome of study such as is very unlikely to be undertaken by anyone not following the profession, and which gives new interpretations of what has gone before, that is, that only such as have had executive experience in the architectural profession and have studied to a very great degree are likely to develop such genius.

As a matter of fact it is much more usual to find a great natural talent for draughts-manship than for design. It may be taken as a physical as well as a philosophical fact that man is not an inventor. He is a discoverer, and that original combining or creative power so necessary to the so-called inventor in mechanics is just as necessary to the architect who produces original works; and, as the mechanical inventor depends on the available elements or materials, so does the architect depend on materials and the constructive principles which govern their use.

True originality in architecture must always be a fresh and rational interpretation of structural truths and proportions, and can only be the outcome of the study of those truths and principles, and any sudden and violent demarcation from these axioms of building or their rational developments shows the untutored and uneducated architect.

Architecture has great ideals and the only logical method of attaining those ideals is to study the natural or standard first and then feel the way, yet, under present conditions it is possible for any person to practise as an architect without study or training of any kind, and leave vulgar fripperies as heritages and a reflex of the architectural art of this present generation.

This age is the antiquity of future ages, and has a precious heritage in the works of past ages, and yet these irresponsible persons are allowed to destroy the beauty of our villages, the interest of our towns, and mar our city streets at every turn.

It is the duty of this generation to see that architectural tradition does not suffer at its hands, or through its negligence, and that the tradition should be carried on and handed over in some degree the better for the care it has received.

The Registration of Architects, by binding the members of the profession together, by enforcing a statutory qualification, by emphasizing the necessity for the study of architecture as an art, and through the power it would have as a united and definite profession, able to speak with one voice, could only have the effect of furthering this ideal of carrying our tradition forward and proving to future critics that this generation was solicitous for the well-being of that art which is undoubtedly the truest index to the culture or civilization of any age.

It is curious to reflect that the world is now much older than it was when the principles of classic architecture were evolved, and that we are now living in the greatest antiquity the world has yet seen, and, although wisdom is generally attributed to age, it can hardly be said that any great administrative wisdom has been applied to the evolution of art in architecture, or any acumen displayed in the general application of accepted principles and proportions discovered in the comparative infancy of civilization.

Our civilization has become utterly commercial and so prejudicial to art that the policy of Registration is justified. It is not an ideal policy but the necessities of the case are such that there appears to be no alternative.

Registration Abroad.

Italy, Spain, Russia, several of the United States of America, the Transvaal and some of the Canadian Provinces have successfully adopted Registration, while Germany and Hungary compel all public architectural officials to have a Government Diploma, and from none of these countries do we hear that the spirit of design in architecture has died in consequence.

Registration stands for Statutory Qualification which depends upon architectural Education, and Architectural Education, in whatever light we view it must appear the most important subject that can engage the attention of the architect, and it is most important that he should now support the policy of Registration if he wishes architects to control the necessary qualifying examinations, and those second-rate colleges which profess to turn out architects ready to practice after very short periods of tuition, and who simply swell the crowds of badly trained assistants. Statutory Qualification, to be really satisfactory, should be managed from one fountain head, and no body should be allowed entirely independent powers of examination or Registration, and the anomalies which exist in other Registered professions should be avoided. In the medical profession particularly it is possible to practice with qualifications which are very different in standing.

In former times barbers were surgeons and surgeons were barbers, and at the present moment builders are architects and architects are builders, but the architect is now really a professional man as distinct from the builder as the surgeon is from the barber. The architect's first duty is to his client, and our commercial system is such that all professional societies are agreed that the architect should have no interest in building operations or materials when acting for a client. This disposes of the contention that the architect is entirely an artist and not a professional man subject to such policies as Statutory Qualification and Registration. Artists and sculptors are really for the most part speculators who produce their works of art on the chance of finding a buyer, but the architect holds an entirely different position as the professional man instructed by his client, not only to produce suitable and artistic

work, but to look after his financial interests with regard to value for money from contractors and others.

The public have a right to know if every professional man working in such a way has had a proper architectural training, and is held officially responsible for his professional probity. Registration would provide an official register of names and qualifications which would be an effective check on the abuse of professional titles or the use of titles which have little or no bearing on the profession practised. In short, it is claimed that the Statutory Qualification of Architects would provide an educated and responsible profession, would benefit the progress of architectural art by convincing the public of the importance of the profession and its work, would make it immediately possible to get statistics on which to base proposals for the improvement of the position of the assistant, and generally raise the profession to that standing which it ought to have in the public estimation.

The progress of art depends upon public support, and the public is always impressed by strength. Milizia said, "If massive columns are close to each other, they appear more massive still; and slender columns when wide apart, appear slenderer still." It is surely easy and natural for architects to apply this architectural maxim to their professional affairs. Every architect is a column in the structure of the profession, and if architects bind themselves together under Registration, in the interests of their art, as well as in the public interest, the tendency will be for the public to respond by showing appreciation of architectural refinement and excellence, and condemning the vulgar and inartistic.

Lectures on Art Subjects.

Professor A. Wallace Rimington, R.B.A., A.R.E., Hon. M.S.A., will deliver a course of five lectures on "Art Subjects," with lantern and other illustrations, on alternate Fridays, at 3 p.m., at Queen's College, Harley Street, W., beginning January 27th. In the course of his lectures, Professor Rimington will deal with present day currents of opinion upon Art—more especially with regard to painting; some of the qualities which are characteristic of great Art; the understanding of Pictures; the building up of a Picture; and the Educational value of Pictures. The fee for the course of five lectures is Fifteen Shillings, or single lectures There Shillings and Sixpence each.



Photo by Henry Walker.

STRETTON, CHESHIRE.

Sundials.

'Tis an old dial, dark with many a stain,
In summer crowned with drifting orchard bloom,
Tucked in the autumn with the yellow rain,
And white in winter like a marble tomb.
And round about its gray, time-eaten brow
Lean letters speak—a worn and shattered row:
"I am a shade—a shadowe too art thou,
I mark the time. Saye, gossip! Dost thou soe?'

Austin Dobson.

The sundial is reminiscent of those days of leisure when hunger sounded the dinner bell, when drowsiness rang the Curfew, and when labour ceased with the setting of the sun.

The history of these interesting old dials is somewhat obscure, but it is generally believed that the Babylonians or Chaldeans were the first to divide the day by some rude mechanical appliance long before the commencement of the Christian Era. The first authentic record of the existence of sundials is found in the Book of Isaiah, viz..." Behold, I will bring again the shadow of the degrees which is gone down in the sundial of Ahaz, ten degrees backward." This reference is supposed to be to a dial which came from Assyria about 714 B.C. The lucid atmosphere of the East was favourable to celestial contemplation, and it is a well-known fact that sundials are most plentiful under clear skies. In China they are as common as clocks in this country, and the Japanese carry small portable dials as we carry watches. There is, however, one notable exception to this general rule. The Egyptians do not appear to have employed sundials, and their methods for measuring time appear to be unknown. A sundial was discovered at the base of Cleopatra's Needle, but, that was of Greek origin. Some archeologists are of opinion that the obelisks of Egypt were erected as gnomons with a circle of stones around them to mark the divisions of time. In Upper Egypt palmrods are believed to have been planted for this purpose, and the reference in the Book of Job: "As a servant earnestly desireth the shadow," doubtless refers to a crude arrangement of this character. Sundials were introduced into Greece by Anaximander of Miletus, about 560 B.C. The Romans adopted them from the Greeks, the first example being set up in Rome 293 B.C., in the Court of the Temple of Quirinus, by Papirius Cursor. Cicero, writing 48 B.C., refers to a sundial he wishes to put up in his villa, and his death is said to have been predicted when a raven struck off the gnomon of the dial.

The Romans placed sundials on temples, baths, houses, in public places, and on their tombs. In the latter case, it was cynically suggested that they were so placed in order that passers-by might be induced to pause and read the epitaphs. Sundials are still found upon tombs in England, a quaint example may be seen in Mellor Churchyard in Derbyshire.



Ploto by Heury Watker.

WILMSLOW, CHESHIRE.

In America there are traces of sundials of earlier date than the Spanish Conquest. In England the oldest dial may be seen on the Cross at Bewcastle, which dates back to 670 A.D.

In Norman-England sundials were placed on the public buildings, and at the junction of important highways for the benefit of travellers. Seven Dials, for instance, was so called because a column stood there to which seven dials were attached facing the several roads which converged at that spot.

It was not until the 16th century that sundials became fashionable in private gardens and over the doors of churches. Upon their introduction they were regarded from a purely utilitarian standpoint, and as is usual with all new inventions they were subject to adverse criticism as the following lines testify:—

The gods confound the man who first found out How to distinguish hours. Confound him, too, Who in this place set up a sundial To cut and hack my days so wretchedly Into small pieces. When I was a boy My belly told me when it was proper time To go to dinner, when I had aught to eat; But, nowadays, why even when I have I can't fall to unless the sun gives leave.

In course of time the decorative possibilities of the sundial were appreciated, and pedestals of excellent design were constructed, many of which gain our admiration to-day. At this period, mottoes were introduced on the dials. As a rule they were quaintly beautiful, sometimes abrupt and dictatorial, but an attempt was generally made to carry out the following injunction: "A sundial motto should be as short as the poesy on a ring, as clear as the sun that shines on the dial's face."

The following selection will serve to show their diversity:-

- "BEGONE ABOUT YOUR BUSINESS!"
- "I COUNT TIME : DOST THOU ?"
- "LIGHT AND SHADOW BY TURNS BUT ALWAYS LOVE."
- "LET OTHERS TELL OF STORMS AND SHOWERS
 I'LL ONLY COUNT YOUR SUNNY HOURS."

During the past decade there has been a revival of interest in the sundial, and many examples have been set up in old-world, and in new gardens. The pedestal dial is a decorative adjunct to any garden or terrace, and if it is provided with an up-to-date Helio-Chronometer, it becomes not only a garden ornament, but a faithful recorder of time without calculations or allowances of any kind.

HENRY WALKER.





LYMM.



EASTHAM.



PRESTBURY.

Photographs by Henry Walker.

R.I.B.A. Regulations for Architectural Competitions.*

Architectural Competitions and Unprofessional Conduct.

The attention of Members and Licentiates of the Royal Institute of British Architects is called to the following resolution passed by the Council at its meeting of November 21st, which is to form No. 6 of the Resolutions relating to Professional Conduct: "Any Member or Licentiate of the Royal Institute who takes part in any competition as to which the Council shall have declared by a resolution published in the Journal of the Royal Institute that Members or Licentiates shall not take part, because the conditions are not in accordance with the published Regulations of the Royal Institute for architectural competitions, shall be deemed to be guilty of unprofessional conduct."

The Society of Architects have under consideration a Code of Ethics, dealing with matters of professional etiquette, including the question of unsatisfactory Competitions.

Most architects, says Surveyor and the Civil Engineer, are members of either the Royal Institute of British Architects or The Society of Architects, and the permanent officials of these bodies keep a watchful eye upon the advertisement columns of the technical Press. In the event of a competition with unsatisfactory conditions being advertised, it is almost a certainty that both these architectural bodies will invite the attention of the authority proposing the competition to the items in the conditions which are considered unsatisfactory. Action of this nature is being taken almost every month, and in the large majority of cases it is found possible to obtain the amendment of the unsatisfactory conditions. The appointment of a competent architect as an assessor is rightly made a sine quâ non. In the unlikely event of the representations being ignored, the architectural bodies have their final remedy in issuing a request to their members to refrain from competing, and this has been done on a few occasions during recent years. Of course, there will still be some men who will compete, but a successful competition from the promoters' standpoint can hardly result, and professional men who have some respect for their calling are thus able, by joint action, or rather, inaction, to protest against unfair conditions. This policy on the part of architects has been evolved only comparatively recently. Twenty years ago the conduct of architectural competitions was generally most unsatisfactory, but by dint of united action something of a reformation has been accomplished.

^{*} The Regulations are not intended to apply to small limited private competitions.

R.I.B.A. Regulations for Architectural Competitions.

Members of the Royal Institute of British Architects and Allied Societies do not compete excepting under conditions based on these Regulations, and as The Society of Architects is in agreement with the principles laid down, its members should also consider themselves bound by these Regulations.

The Conditions of a Competition shall contain the following Regulations (A) to (F) as essential:—

- (A) There shall be appointed for every Competition one or more fully qualified professional Assessors, to whom the whole of the designs shall be submitted.
- (B) No promoter of a Competition, and no Assessor engaged upon it, nor any employee of either, shall compete, or assist a competitor, or act as Architect, or joint Architect, for the proposed work.
- (C) Each design shall be accompanied by a declaration, signed by the competitor, or joint competitors, stating that the design is his or their own personal work, and that the drawings have been prepared under his or their own supervision. A successful competitor must be prepared to satisfy the Assessor that he is the bona-fide author of the design he has submitted.
- (D) That premiums shall be paid in accordance with the Assessor's award, and the author of the design placed first by the Assessor shall be employed to carry out the work, unless the Assessor shall be satisfied that there is some valid objection to such employment, in which case the author of the design placed next in order of merit shall be employed, subject to a similar condition. The award of the Assessor shall not be set aside for any other reason.
- (E) If no instructions are given to the author of the design selected by the Assessor to proceed within twelve months from the date of the award, then he shall receive payment for his services in connexion with the preparation of the Competition drawings of a sum equal to 1½ per cent. on the amount of the estimated cost. If the work is subsequently proceeded with, the 1½ per cent. previously paid to him shall form part of his ultimate commission.
- (F) The selected Architect shall be paid in accordance with the Schedule of Charges sanctioned and published by the Royal Institute of British Architects.

1.—The promoters of an intended Competition should, as their first step, appoint one or more professional Assessors, architects of established reputation, whose appointment should be published in the original advertisements and Instructions. The selection of an Assessor should be made with the greatest possible care, as the successful result of the Competition will depend very largely upon his experience and ability.

R.I.B.A. Regulations for Architectural Competitions.

The President of the Royal Institute of British Architects is always prepared to act as honorary adviser to promoters in their appointment of Assessors.

- 2.—The duties of an Assessor are as follows:
 - (a) To confer with and advise the promoters on their requirements and on the questions of cost and premiums to be offered.
 - (b) To draw up Instructions for the guidance of competitors and for the conduct of the Competition, incorporating the whole of the clauses of these Regulations which are applicable to the particular Competition.

Note.—It is essential in drawing up the Instructions to state definitely which of the conditions must be strictly adhered to, under penalty of disqualification from the Competition, and which of them are optional.

- (c) To answer queries raised by competitors within a limited time during the preparation of the designs, such answers to be sent to all competitors.
 - (d) To examine all the designs submitted by competitors and to determine whether they conform to the Conditions and to exclude any which do not.
 - (e) To report to the promoters on the designs not so excluded and to award the premiums in strict adherence to the Conditions.
 - 3.—Competitions may be conducted in one of the following ways:—
 - (a) By advertisement, inviting architects willing to compete for the intended work to send in designs. For Competitions for public works of GREAT ARCHITECTURAL IMPORTANCE THIS METHOD IS RECOMMENDED.
 - (b) By advertisement, inviting architects willing to compete for the intended work to send in their names by a given day, with such other information as they may think likely to advance their claims to be admitted to the Competition. From these names the promoters, with the advice of the Assessor, shall select a limited number to compete, and each competitor thus selected shall receive a specified sum for the preparation of his design.
 - (c) By personal invitation to a limited number of selected architects to join in a Competition for the intended work. Each competitor shall receive a specified sum for the preparation of his design.

Note.—Where a deposit is required for supplying the Instructions it shall be returned on the receipt of a bona-fide design, or if the applicant declines to compete and returns the said Instructions within a month after the receipt of replies to competitors' questions.

4.—The number, scale, and method of finishing of the required drawings shall be distinctly set forth. The drawings shall not be more in number, or to a larger scale than necessary to clearly explain the design, and such drawings shall be uniform in

R.I.B.A. Regulations for Architectural Competitions.

size, number, mode of colouring, and mounting. As a general rule a scale of 16 ft. to 1 in. will be found sufficient for plans, sections, and elevations, or in the case of very large buildings a smaller scale might suffice.

Unless the Assessor advises that perspective drawings are desirable, they shall not be admitted

- 5.—No design shall bear any motto or distinguishing mark; but all designs shall be numbered by the promoters in order of receipt.
 - 6.—A design shall be excluded from a Competition—
 - (a) If sent in after the period named (accidents in transit accepted);
 - (b) If it does not give substantially the accommodation asked for;
 - (c) If it exceeds the limits of site as shown on the plan issued by the promoters, the figured dimensions on which shall be adhered to;
 - (d) If the Assessor shall determine that its probable cost will exceed by 10 per cent. the outlay stated in the Instructions, or the estimate of the competitor, should no outlay be stated. If the Assessor be of opinion that the outlay stated in the Instructions is inadequate, he shall not be bound in the selection of a design by the amount named in such Instructions, but the question of cost shall nevertheless be a material element in the consideration of the award;
 - (e) If any of the Conditions or Instructions other than those of a suggestive character are violated;
 - (f) If a competitor shall disclose his identity or attempt to influence the decision.
- 7.—All designs and reports submitted in a Competition for a public building, except any excluded under Clause 6, shall be publicly exhibited after the award has been made, which award shall be published at the time of exhibition; and all designs and reports submitted in a Competition for a private building shall be similarly exhibited to the competitors.
- 8.—All drawings submitted in a Competition, except those of the design selected to be carried out, shall be returned to the competitors.

The usual R.I.B.A. Scale of Charges for Assessing Competitions, whether by jury or otherwise, is the sum of Thirty Guineas, plus one-fifth per cent. upon the estimated cost of the proposed building.

The Authorship of Buildings.

From time to time, says Construction, one hears much concerning the authorship of buildings that leave a grave doubt in the mind as to where the credit really belongs. This, as a rule, is brought about by a statement which charges one architect with appropriating under his own name, work that was in reality designed by another. It seems that there are certain instances where the identity of the rightful designer has been completely submerged, owing to the fact that circumstances had placed him in an advisory or subordinate capacity at the time the plan was executed, but yet it hardly follows that the reputation and professional integrity of the majority of architects can be justly assailed on these grounds. Touching upon a controversy regarding the disputed authorship of the old New York City Hall, "Vindex," in a letter published a short time ago in the Architectural Record, deals interestingly with this important subject. "Doubtless," says the writer, "the great majority of architects do the work they pretend to do. Still, it were desirable that there should not be five per cent. or one per cent. of basis for censure. A distinguished American architect, lately deceased, concerning whose own authorship of the work that went out with his office-stamp upon it there never was any question, was hugely disgusted whenever it appeared that there was such a question about the work that bore the office-stamp of any one of his contemporaries and competitors. 'Yes,' he remarked of a rather exceptionally good piece of work emanating from an office in which good work was not the rule, 'that is weak, but not infamous. It does not show the same nasty mind as the bulk of his work. He had a better draughtsman that year than usual.' But when it seemed to be demonstrated that some architect confined his attention to getting the jobs and handed them over to some underling to do, he exclaimed in disgust: 'Are we architects or are we brokers?'

"This architect used to say that the only way of finding out whether an architect did his own work or had it done was to watch it from year to year, and note the difference. But, we know that even this test is not final, that a work may go on for a decade, even for a generation, under one man's name, which is really done by another whose name is not known out of the office in which he works, or out of some strictly limited social and artistic circle. In England it is held to be 'bad form' for an employed draughtsman to claim his own work, even among his own acquaintances. The theory, promulgated by employing architects, is that not only the work of the employed, but the reputation of it, is an asset of the office and not of the employed individual. So Charles Reade, when once reproached by an 'anonymuncule' or a 'pseudonymuncule,' for stealing a Frenchman's brains, vehemently retorted that he did not steal them, but honestly paid for them and had bought permission to use a plot, scene, or incident, or whatever it may have been. Whereto, Anthony Trollope

retorted, with justice, that Charles had missed the point, that the gravamen of the charge 'was not that of taking another man's property, but of passing off as his own creation that which he did not himself create.' That is precisely the point. The memory of McComb would not be vindicated if he had produced, as possibly he might have produced, a quit-claim receipt from Mangin, covering all Mangin's right, title and interest to the plans for the City Hall.

"As to Charles Reade, he might have said of himself, as Johnson said of Dryden, that 'his known wealth was so great that he might borrow without impeaching his credit.' And that is, unfortunately or fortunately, the case with a considerable proportion of the architects who put their names to work that they did not do. They could have done it better, or at least as well. But they were engrossed by another job. Or they were hunting another job. 'Peradventure they were on a journey,' Europe becomes very attractive when the job is secured. The loss, in these cases, is ours:

'Ah, but the artist that was gone.'

"How desirable, if possible, some regulation whereby an architect should be prevented from taking more work than he can personally attend to and really do.

"It is 'commercialism' evidently enough, that is at the bottom of the defection of this kind of architect from his appointed mission of design, the desire to have more to do than he can do himself. Every architect who is an artist knows when he is yielding to this temptation, knows when he is taking more than he can do, knows that he ought to be ashamed of himself. But also, of course, there is always the hustler, the 'architect,' the proprietor of an officeful of draughtsmen whose work he can neither do nor really judge, and who aspires to the status of an artist because he needs that reputation in his business as a hustler, who has facilities for getting jobs, but no faculty for doing them. Morally he is perhaps above the perverted artist, knowing no better. Artistically he is above nobody, being an aesthical 'chump.' Still he is exasperating. To have him affix his office imprint on work of which he does not know whether it is good or bad, is bad enough. But to have him look you in the face and tell you that he personally did a thing which you know him to have been personally incapable of doing, when the thing has turned out to be a success, and when you may know the thing to have been done by one of his draughtsmen, or by his artistic partner—that is not only irritating but infuriating. When he goes these lengths, he sinks, even morally, below the perverted artist who might have done the thing in question, only he didn't. Then it is that one yearns to 'do the brass-plate act,' that one longs for some exposure of the 'chump' who is not commercialized only because he was born exclusively commercial. But it cannot be expected that the artist shall often secure such a posthumous revenge upon the chump as it appears Mangin has secured upon McComb,"

Royal Sanitary Institute Congress, Belfast, July 24th to 29th, 1911.

The Council have accepted the invitation of the Royal Sanitary Institute for The Society of Architects to be officially represented at the Congress to be held at Belfast next July.

The following Members have been appointed the Official Delegates of the Society:— MR. ANTHONY SCOTT (Local Hon. Secretary), Dublin.

MR. GODFREY W. FERGUSON, J.P., Belfast.

Meetings and other Fixtures of the Society.

Subject to such alterations and additions as may be announced from time to time in the "Journal" or by circular.

Feb. 9th. Committees and Council Meetings, followed by fourth Ordinary
Meeting, at 8 p.m. Paper on "The Turned Lattice Work of
Egypt," by Col. F. S. Leslie, R.E. (Past Vice-President, Hon.
Secretary.) The lecture will be illustrated by lantern slides and
specimens of work. Ladies are specially invited.

,, 23rd. Committee Meetings.

Mar. 8th. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.

9th. Entries close for Home Examinations for Membership and Scholarship.

" Committees and Council Meetings, followed by fifth Ordinary Meeting, at 8 p.m. Paper on "The Relation of Sculpture and Carved Ornament to Architecture," by Mr. W. S. Frith.

, 23rd. Committee Meetings.

April 6th. Committees and Council Meetings, followed by sixth Ordinary Meeting at 8 p.m. Paper on "English Furniture," by Mr. Percy Macquoid, R.I.

11th, 12th, 13th. Examinations for Membership.

" 27th. Committee Meetings.

28th. Annual Dinner.

May 1st. Last day for submitting Travelling Studentship Drawings.

, 3rd. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.

4th. Smoking Concert, 28, Bedford Square.

,, 11th. Committees and Council Meeting, followed by seventh Ordinary Meeting at 8 p.m. Paper on "Hospitals," by Mr. A. Saxon Snell, F.R.I.B.A.

The Society of Architects' Travelling Studentship. Regulations and Conditions, 1911.

Candidates for the Travelling Studentship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscriptions for the current year. (The maximum age limit is 28 years.)

The Competition Drawings, upon which the Studentship will be determined, must be delivered, carriage paid, at the Society's Offices, 28, Bedford Square, London, W.C., not later than 6 p.m. on the first day of May, 1911, without name, motto, or other mark of identification, and must have attached thereto a plain sealed envelope containing the competitor's signature and address appended to a declaration that the drawings are the candidate's unaided work.

The plans will be numbered as received, and a corresponding number will be placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Studentship is of the value of Twenty-five Pounds (£25), and carries with it the Silver Medal of the Society. The holder will be required to undertake, between June 1st and October 1st, a sketching tour of not less than three weeks' duration.

The successful candidate must, within fourteen days after the award, notify the Secretary of the date of the commencement of the tour and its proposed locality, and will then receive the sum of Fifteen Pounds (£15).

A diary of the tour must be submitted with the measured drawings, sketches and notes, all of which must reach the Secretary before October 1st.

Subject to the Council being satisfied with the work executed during the tour, a further payment of Ten Pounds (f10) will be made, and the Silver Medal presented to the candidate at the first Ordinary Meeting of the Session, or some other date to be fixed by the Council.

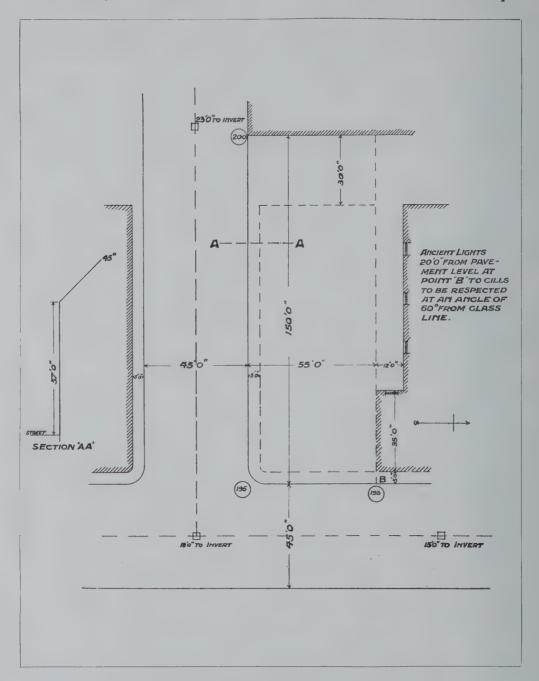
The Council reserve the right to exhibit or reproduce the drawings, and their decision on any matter arising is to be final.

The Studentship may only be held once by the same person.

A candidate who does not adhere to the conditions and instructions in every particular, will be disqualified.

Subject for 1911, A Social Club.

A site plan is given showing the available building space, the adjoining buildings, levels, and other details. Porches, bay-windows and other architectural features may project beyond the building line.



SITE PLAN, AND SECTION SHEWING LIMIT OF HEIGHT OF OUTER WALL.

Main sewer, gas and water mains, and electric cables are laid in the roads.

The building is to consist of basement, ground, first, second, third and fourth floors, and the following accommodation is to be provided, the disposition of the rooms being left to the competitors.

Main entrance, vestibule, lounge hall, porter's box, telephone, lift to all floors, main and secondary stairs, morning room, writing room, reception room, two billiard rooms (one with two tables), lavatories to all floors, serving lobbies where required, dining room, library, card rooms, committee room, secretary's office, etc., etc.

Trade entrance, kitchen and all necessary offices, servants' hall, plate and strong rooms, stores, staff lavatories.

Housekeeper's rooms, a few bedrooms for members' use, bath rooms, stewards' rooms and staff bedrooms.

The accommodation on the fourth floor may be wholly or partly in the roof.

Fire hydrants on every floor, and adequate means of escape from fire to be provided.

The problem is to provide a building of the most suitable accommodation, on a given site, at the least possible cost, and complying in every respect with local building by-laws.

The materials used and style adopted are left to competitors.

The estimated cost of the building based on the cubical contents must be endorsed on one of the drawings, showing the method adopted and the price allowed.

Drawings required.

Block plan, drawn to a scale of 16 ft. to the inch, showing: -

(a) The position of the buildings; (b) drains, with their falls and depth below ground; (c) entrances; (d) boundary walls or fences and their nature; (e) roads; (f) the points of the compass.

A complete set of working drawings to $\frac{1}{8}$ in. scale, comprising plans of each floor internal fittings to be shown, and drainage and heating. Elevations of each front and at least three sections, two cross and one longitudinal, and at least one sheet of details including a half-inch detail of part of the main front. Perspective sketch optional.

The drawings are to be of such a character as would be required by a contractor to carry out the work, and are to be executed on white paper, imperial size, mounted on strainers or millboard. They must be inked in and not left in pencil.

Enquiries.

Any points raised by competitors up to February 20th will be dealt with and replied to in the next ensuing issue of the *Journal*.

Travelling Studentship Competition.

Replies to Enquiries.

The following points have been raised by competitors, and are here dealt with.

Further enquiries will be answered in the next issue, provided they are made before February 20th.

Question 1. Can the space at the West end of site, figured 30' 0" be built upon?

Answer. No.

Question 2. Will this space belong to the Club and require boundary walls?

Answer. Yes. Boundary wall on South and party wall on North.

Question 3. Can the approximate number of Club Members be given?

Answer. No. It is left to competitors to provide what accommodation they think desirable.

Ouestion 4. Must a roof of 45° pitch, be used as shown in section AA?

Answer. Yes

Question 5. Can the Club be built on to the adjoining building, provided the Ancient Lights shown are respected?

Answer. Yes. The dotted line, from point B to the Western boundary, indicates the centre of the party wall.

Question 6. Is any application form necessary?

Answer. A form of declaration and an envelope for the same will be supplied on application in due course.

Question 7. Is a smoke room to be provided?

Answer. The accommodation required is outlined in the particulras, but competitors have a free hand as to further rooms, etc.

Question 8. What does "least possible cost" infer, as buildings costing 6d. per cube foot in some districts would cost more in London?

Answer. It is assumed that a competitor will price his building at the figure current in his district, the adjudicators being aware of the apparent discrepancy referred to.

Question 9. Is the Club to be built in a place like London which might necessitate a costly elevation?

Answer. The site is assumed to be in a town, and the question of style and cost is left to the competitors.

Question 10. Does the reference to projecting features cover special treatment of main angle?

Answer. Yes. The method of dealing with this item will probably be an important factor.

Question 11. Does the firm line, 5'0'' from the dotted one, represent the boundary or the building line?

Answer. The 5'0" represents the distance which the building is to be set back from the boundary to provide an area for the basement premises.

Question 12. Is the Club intended for ladies as well as gentlemen?

Answer. No; the Club is for men.

Architectural Scholarship, 1911. New Regulations.

The Scholarship is for the future to be awarded for Measured Drawings, and Competition is confined to Students of the Society, who are under 23 years of age on the latest day fixed for the delivery of the drawings, viz., September 30th, in any year.

Conditions and Subject.

Candidates for the Architectural Scholarship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscription for the current year. The maximum age limit is 23 years on September 30th, 1911.

Candidates are required to submit at least three and not more than four sheets of Measured Drawings and Details, of some building of historic interest.

The Drawings are to be prepared between January and September, 1911, and are to be executed on imperial size paper, and delivered carriage paid at the Society's Offices, 28, Bedford Square, London, W.C., on or before September 30th, 1911, together with the original sketches and notes.

The Drawings must be without name, motto, or other mark of identification, and must have attached thereto a plain sealed envelope containing the Competitor's signature and address appended to a declaration that the Drawings, etc., are the candidate's unaided work.

The Drawings need not be mounted, but they must be delivered flat and not rolled.

The Scholarship is of the value of £10, and will be disbursed by the Council on behalf of the holder.

The award will be made by the Council subject to their approval of the manner in which the Candidate proposes to utilize the Scholarship, or alternatively to the Candidate agreeing to such scheme as the Council may decide upon.

Should the scheme not call for the payment of so much as Ten Pounds (£10), the holder may receive the value of the balance in books or instruments.

The successful Candidate may be required, before the award is confirmed, to produce to the Council evidence as to age.

The Drawings will be numbered as received, and a corresponding number placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Council reserve the right to exhibit or reproduce the drawings, and their decision on any matter arising, is to be final.

The Scholarship may only be held once by the same person.

A candidate who does not adhere to the conditions in every particular, will be disqualified.

Examinations for Membership.

DATE AND CENTRES.

An Examination in the following subjects will be held by The Society of Architects, in London, Manchester, Cardiff and Oxford, on April 11th, 12th and 13th, 1911.

An Examination will also be held in Johannesburg and other South African Centres, under the auspices of the South African Branch of the Society, during December, on dates to be arranged. Application should be made in the latter case to the local Hon. Secretary, Mr. Edward H. Waugh, P.O. Box, 1049, Johannesburg.

Section I. ARCHITECTURE.

,, II. BUILDING.

, III. PRACTICE.

,, IV. SANITATION.

Planning, design, architectural history.

Construction and materials.

Contracts, specifications, quantities.

Ventilation, drainage, water supply, etc.

The latest date of entering for the Home Examination is March 27th, 1911.

AGE LIMIT, QUALIFICATION, AND FEES.

Candidates for the examination must be 21 years of age or over, and have served at least three years' pupilage to an architect, or produce other evidence of sufficient architectural training. Examination papers will only be issued to candidates whose fees* (£2 2s. 0d.) are paid in advance (see entry form).

N.B.—A candidate failing to qualify in any of the subjects may sit for such subject at either of the two following examinations without further fee.

Successful candidates will be awarded a certificate qualifying them to make an application for membership in conformity with the regulations.

* The fees for the South African centres are £4 4s, for the first sitting, and £2 2s, for each subsequent one,

The following regulations apply only to Students of the Society,

Students of the Society may take the examination by sections at a fee of 15s. for each section, or in the case of students who are 21 years of age or over, the whole examination at one sitting for a fee of one-guinea-and-a-half: in each case under the above conditions as to procedure if relegated or successful.

Certificates of proficiency will be awarded in those sections in which a Student candidate qualifies, or a full certificate as the case may be.

A holder of the four sectional certificates of proficiency issued by the Society, or their equivalent in certificates of exemption, who has attained the age of 21 years, may apply for the full certificate entitling the holder to make an application for membership.

Books Received.

The Hon. Librarian acknowledges with thanks the receipt of the following books and invites further gifts or donations to the Library Fund.

BUILDING TIMBERS AND ARCHITECTS' SPECIFICATIONS (J. Davies). Haworth and Co., 84, Leadenhall Street, E.C. Price six shillings.

Written with a view to assisting the architect and contractor, by correcting current errors and disseminating up-to-date information respecting the commercial use of timber.

Alphabets Old and New (Lewis F. Day), (Third Edition). B. T. Batsford. 94, High Holborn, W.C. Price five shillings.

Concerns itself only with letters and the corresponding numerals. The book is intended for working artists and others who have occasion either to work in the manner of some given period or to design lettering of their own,

Vanishing England (P. H. Ditchfield). Methuen & Co., 36, Essex Street, W.C. Price fifteen shillings.

An endeavour by means of the artist's pencil, rather than the writer's pen, to promote an affection for the relics of antiquity which time has spared.

SMALL COUNTRY HOUSES OF TO-DAY (L. Weaver). Country Life, 20, Tavistock Street, W.C. Price fifteen shillings.

A monograph on representative small country houses of to-day, designed by architects of established reputation. The book serves the double purpose of explaining the buildings themselves, setting out the conditions which determined their plan and treatment, and estimating their place in relation to English culture and habits.

THE YEAR BOOK OF THE SCIENTIFIC AND LEARNED SOCIETIES OF GREAT BRITAIN AND IRELAND. Griffin & Co., Exeter St., Strand, W.C. Price six shillings. A record of work done in science, literature and art during 1909-10. A valuable record of the subjects which have occupied the most active intellects during the past year.

New Premises Building Fund.

The attention of Members and Students is invited to the Fund opened by the Council. It is hoped that the liberality of Members will enable the Council to raise a sum sufficient to provide for the cost of the present building and equipment, and for future extension,

Mainly about Members.

We regret to announce the deaths of the following Members: -

BOYER, WILLIAM, Market Place, Peterborough. Mr. Boyer was articled to Mr. H. M. Townsend of Peterborough, and had been in practice for about twenty-three years, for the past fifteen of which he had been a Member of the Society. He was about forty-five years of age, and was responsible for the design and erection of many business premises, schools and other buildings in the district. Mr. Boyer was well known locally in Masonic circles, being a Provincial Grand Officer, and he took an active interest in the formation of The Society of Architects Lodge, of which he was one of the founders.

Ashton, John Thomas, 7, Market Street, Altrincham. Mr. Ashton who died some months ago, intimation of which has only recently been received, was articled to the late Mr. Maxwell Roscoe, of Altrincham, whom he afterwards joined in partnership. For the past sixteen years, Mr. Ashton had been in independent practice, mostly in buildings of a commercial character. He was fifty years of age, and had been a Member of the Society for five years.

SKINNER, EDWARD, F.R.I.B.A., Colombo, Ceylon. Mr. Skinner was articled to Mr. John Rust, the City Architect of Aberdeen, with whom he remained for twelve years. He had been in practice for the last fourteen years, and had carried out many works of an important character in Colombo and district. He joined the Society in 1909, and at once showed his active interest by accepting the appointment of Local Hon. Secretary. He was forty-two years of age.

We have also to record with regret the deaths of two gentlemen, both of whom were known to the Society and had rendered services to it or to the profession generally.

HOWARD COLLS, widely known and respected in his own and the architectural profession, whose public spirited action in the Ancient Light Case of "Colls ats The Home & Colonial Stores, Ltd," was recognized by the Society which presented him with an address of congratulation and thanks.

T. R. Croger, a recognized authority on the antiquities of London and similar subjects, who in two successive years lectured before the Society on "Some Historic Buildings in the City of London," and on "Shakespeare and Old London."

New Headquarters for the Women's Social Work in connection with the Salvation Army have been built in Mare Street, Hackney. Mr. Alexander Gordon, f.s.i., of Queen Victoria Street, E.C., is the architect of the building, which will provide thirty-three distinct sets of offices on four floors.

MR. HERBERT KENDALL, Architect and Surveyor, of Parkstone, Dorset, has taken over the business of the late H. F. J. Barnes, Lowergate Street, Poole, who had been in practice as an Architect, Surveyor and Engineer for between forty and fifty years. Mr. Kendall proposes carrying on his business at Parkstone and also at Poole.

MR. W. Stirling, formerly of Dublin, has been appointed Clerk of Works—under direction of the Messrs. C. F. Stevens & Co.—to extensive buildings in Colombo, for the Grand Oriental Hotels Co., Ltd., a wealthy Corporation, whose head offices are in London. It appears that over £1,000,000 will be spent by that body within the next three years, through the East; and Messrs Stevens & Co. have been appointed the architects.

The opening ceremony of the Sons of Temperance Friendly Society, "House of Rest," at South Park, Ilford, took place on Saturday, December 10th, 1910, by Councillor R. W. Moffrey, J.P., President of the National Conference of Friendly Societies, supported by an influential gathering. The first portion of the work has cost £1,597, there being room for two wings as extension. The architect is Arthur C. Russell, who also designed the New Administrative London Offices of the Sons of Temperance Friendly Society, Blackfriars Road, S.E., formally opened on Saturday, 17th December, 1910, by The Right Honourable the Lord Mayor, Sir T. Vesey Strong. The building is designed in the Italian Renaissance with French Renaissance features; the front being in Forest of Dean stone and Norwegian granite. The total cost including Conference Hall at rear is about £7,250.

Mr. Thos. Baines of 1, Gresham Buildings, E.C., Honorary Solicitor to The Society of Architects, has been successful in obtaining in competition the appointment of Clerk to the Magistrates of the Wandsworth Division of London.

MR. WALTER W. THOMAS, J.P. (Past President), in a letter and plan published in the *Liverpool Mercury*, makes an interesting suggestion for a King Edward Memorial Scheme. He proposes that a statue should be placed in front of St. George's Hall, in Lime Street, between the existing equestrian statues of Queen Victoria and Prince Albert. A memorial of such importance as that of King Edward VII. should, says Mr. Thomas, be placed in the most prominent position in the City, and where the most number of people in Liverpool and visitors will be enabled to view it without any inconvenience. The existing statue of Lord Beaconsfield could be placed in St. John's Gardens, and, he thinks, no one would object to seeing two of the most eminent statesmen of modern times side by side, viz., Gladstone and Beaconsfield.

Papers for Session 1910-11.

The following arrangements have been made for the Session.

1911.

February 9th. The Turned Lattice Work of Egypt. By Col. F. S. Leslie, R.E. (Hon. Sec.)

Ladies are invited.

March 9th. The Relation of Sculpture and Carved Ornament to Architecture. By Mr. W. S. Frith.

April 6th. English Furniture. By Mr. Percy Macquoid, R.I. May 11th. Hospitals. By Mr. A. Saxon Snell, F.R.I.B.A.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Ordinary Meeting.

The Fourth Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday, February 9th, 1911, at 8 p.m.

Agenda:

- 1. The President to take the chair.
- 2. Minutes of the last Ordinary Meeting.
- 3. Nominations for Membership.
- 4. Announcements.
- 5. Ballot for candidates for Membership and Studentship.
- 6. Paper on "The Turned Lattice Work of Egypt," by Col. F. S. Leslie, R.E. Past Vice-President, Hon. Secretary. Illustrated by Lantern Slides and Specimens. Ladies are invited.

Light refreshments will be served after the meeting.

Journal

OF

The Society of Architects

FOUNDED 1884. INCORPORATED 1893.

Including Transactions and Architectural Notes.

No. 41. Vol. IV.

MARCH, 1911.

[New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Registration and Architectural Copyright.

The retiring President of the Devon and Exeter Architectural Society, Mr. W. H. May, M.S.A., in the course of his address said, as regards Registration, what has been done? Little or nothing. The Royal Institute is on the active tout for the new Licentiate class which is to increase its numerical strength—to say nothing of its funds—and enable it to obtain a Registration Bill. Let us wait and see.

From my own point of view I cannot believe that any English Government will sanction so one-sided a measure. The Bill must be universal, and why the Institute should ignore other established societies is only known to itself.

Certain remarks have been made recently in the professional papers to the effect that the Royal Institute is in touch with The Society of Architects concerning the proposed Bill. If such is the case*—and at present there is no official confirmatory statement—it is a movement that will materially strengthen the cause, and I am of opinion that united we shall stand and hold our own, but divided we are bound to fall.

The question of Copyright in architecture has occupied a prominent position during the past year, and one of the most antagonistic views to be overcome is that of Mr. Justice Scrutton, who on appending his signature to the Report of Lord Gorell's Committee made a reservation to the effect that he could not concur in the inclusion of architecture among the protected arts owing to the difficulties he foresaw in the trial of what are new and original features and the remedies for infringment. A great difficulty in this much-vexed question is the apparent impossibility of making legal authorities understand what an architect is and what are his claims to legal recognition and protection. Registration will, of course, be of the greatest assistance on this point.

[*See page 195.—Ed.]

Proceedings.

HE Fourth Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, February 9th, 1911, at 8.0 p.m.

The President, Mr. Geo. E. Bond, J.P., having taken the Chair, the minutes of the previous Meeting, as printed in the *Journal* were taken as read, and were confirmed and signed.

Two nominations for Hon. Membership, eighteen for Membership, and eleven for Studentship were announced, and also the gift from a new member of a number of books for the Library.

The Ballot was then taken and the following Candidates were declared to be duly elected:—

As Members:

Davies. Harold Edward, Hindle. Arthur, Schofield. Richard William,

Winch. ARTHUR.

13, North John Street, Liverpool.

46, Abingdon Street, Blackpool.

c/o Walter W. Thomas, J.P., Past-President, 15, Lord Street, Liverpool.

3, Roundhay Mount Harehill Lane, Leeds.

Col. F. S. Leslie, R.E. (Past Vice-President and Hon. Secretary), then gave an illustrated lecture on "The Turned Lattice Work of Egypt," followed by a demonstration of the working tools of the Egyptian craftsmen.

MR. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), in proposing a vote of thanks to Col. Leslie, said they were very highly honoured in being shown such a wonderful exhibition. There could not be a great amount of carved lattice work in Egypt or for that matter anywhere else, and consequently it was quite an exceptional thing to have a lecture on the subject.

MR. HERBERT FREYBERG, F.S.I. (London), in seconding the vote of thanks said that the Egyptian lattice turners appeared to have reversed what they had always understood to have happened in regard to Romanesque architecture, that a wooden structure was followed by a reproduction in stone, and it seemed that the ornamentists of Egypt, desiring to obtain effect with the least possible exertion, had in their lattice work imitated or reproduced the marble work which was so effective in the Byzantium Churches. He had listened with considerable edification to the remarks of Col. Leslie, and felt particularly fortunate in hearing a lecturer with such a grasp of his subject.

MR. PERCY B. TUBBS, F.R.I.B.A. (Vice-President), then put the proposition to the meeting, which was carried unanimously.

Col. Leslie briefly replied to the vote of thanks, and the proceedings terminated.

The Society of Architects, South African Branch. Fourth Annual General Meeting.

The Fourth Annual General Meeting of Members, Hon. Members and Students of the Branch was held in the Board Room, Trust Buildings, Fox Street, Johannesburg, at 5.15 p.m., on Friday, the 25th November, 1910.

There were present Messrs. Robert Howden, A.R.V.I.A. (President), in the Chair, G. S. Burt Andrews, M. J. Harris, D. Ivor Lewis, Alan S. Monsbourgh, A.R.I.B.A., G. W. Nicolay, J. F. Beardwood, and E. H. Waugh (Hon. Secretary).

Mr. Howden, the retiring President, in his report for the year just closed, said that during the year three new Members had been added to the Register of the Local Branch, of whom two had passed the Society's Examinations, there being now thirty-four Members, seven Students and two Hon. Members, a total of forty-three.

The Examinations were held at Johannesburg and Maritzburg.

The sum of £50 lent to the Branch by the Home Council had been repaid in full. This sum was lent to forward the cause of Registration in the Transvaal.

The sum of £30 advanced by the Local Branch had, in addition to the above £50, been repaid by the Transvaal Institute of Architects who promoted the Bill in Parliament.

Sir Willem van Hulsteyn, Kt., M.L.A., was elected an Honorary Member of the Society, in recognition of his piloting the Registration Bill through the Transvaal Parliament.

The Branch had lent its support to a proposal that a Chair of Architecture and Building Construction should be established at the South African School of Mines and Technology in Johannesburg, and it was likely that at an early date this suggestion would take practical shape. Up to the present very little had been done in South Africa to forward the cause of architecture, and provide a system of academic training consonant with the latest accepted methods prevailing in other Countries. There was no collection of casts or models in the whole of the sub-continent, and the young South African architect had little to inspire him. There was, however, an indication that the tone of architecture was improving. The public were becoming more critical and desirous of more beauty of form than had satisfied them in the past.

Many recent buildings in South Africa had shown this tendency, and the appreciation they had received from the public showed that the desire for better things existed, and if this was encouraged it would result in lasting effects on the architecture of the Country.

The thanks of the Branch Society were due to Mr. S. C. Dowsett for the energetic way in which he had filled the post of Hon. Secretary during Mr. Waugh's absence.

South African Branch.

The President also referred to the fact that the Society had over a thousand Members in various parts of the world, and that twenty-two years ago it introduced the first measure to secure Registration of Architects under Parliamentary Statute. The Transvaal had been the first country in the Empire to grant this, and their local success should encourage those at Home and in Australia in their efforts to secure this object.

Mr. G. S. Burt Andrews was elected President amidst applause. Several Members referring to his long connection with the Society, extending over seventeen years. Mr. Andrews answered in appreciative terms.

Messrs. Harris and Waugh were elected Hon. Treasurer and Hon. Secretary respectively.

After a ballot, Messrs. Nicolay and Ivor Lewis were declared elected as Members of the Committee, and the foregoing gentlemen with Mr. G. H. Stott, Local Hon. Secretary at Maritzburg, comprise the South African Committee.

A vote of thanks was passed to Mr. E. H. Waugh for his services as Hon. Secretary. Messrs. Dowsett and Beardwood were appointed to examine Accounts for the ensuing year, and the following statement of Accounts was read by Mr. Andrews (Hon. Treasurer), and adopted.

Statement of Accounts for year ended 30th September, 1910.

Nov. 29. 1910. Jan. 4. Transvaal Institute Refund Registr Examination Fees 1910. Jan. 4. Transvaal Institute Refund Registr Refund Registr Society of Archite	e of Architects' Part ration Bill	£ s. d. 12 10 5 18 0 0 2 2 0 50 0 0 31 3 9	, 29. , 30. Nov. 6. , 15. , 16. Dec. 1. , 4. 1910. Jan. 4. Feb. 4. Mar. 22. April 8. May 7. Sept. 1.	Standard Bank, Cheque Book Johannesburg Musical Society, Hire o Piano for Soiree J. Moore, Professional Services at Soir R. S. Russell, Typing and Mimeo graphing Annual Report A. G. Monsbourgh, Petty Disburse ments, Soiree Mackay Bros., Musicians for Soiree E. J. Chapman, Catering for Soiree E. J. Chapman, Catering for Soiree E. H. Waugh, Periodicals, 4/6; Advertising, 7/6 Julius Vogl & Co., Hire of Furniture for Soiree Transvaal Leader, Advertising Transvaal University College, Hire o Hall for Soiree Argus Co., Advertising Annual Exam Society of Architects (Lond.), Refunc £50, Draft, 2/6 Cutler & Wilson, Charges on Seal E. H. Adlington & Co., Printing, etc. for Soiree Handel House, Ltd., Periodicals E. H. Waugh, Postages from Oct. 26tl 1908 to April 8th, 1910 W. S. Cowell, Ltd., Seal, £4 15 6 Postal Order and Postage, 2/-	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$ s. 17 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 0 0 0 6 0 6 6 6 0 0 6 6 10 6 9 11 6 9
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Examined and found correct,

(Signed), D. IVOR LEWIS,
S. C. DOWSETT,

November 24th, 1910.

G. S. BURT ANDREWS,

Hon. Treasurer,

November 23rd, 1910.

South African Branch.

A motion by Mr. Harris to the effect that the retiring President shall be ex-officio member of the Committee for two years succeeding the date of his retirement from the Presidentship, was discussed, and it was resolved to recommend the Home Society* to confirm this addition to rules to read as follows:—

"The retiring President shall be ex-officio member of the Committee for one year succeeding the date of his retirement from the Presidentship."

It was further resolved that subject to confirmation of the foregoing resolution, Mr. Robert Howden should be a Member of the Committee for the ensuing year in terms of the resolution.

A motion by Mr. E. H. Waugh to insert after the word "President" in Rule 4, the words "Vice-Presidents" was discussed. The Members felt that the time was ripe for making some recognition of prominent Members resident in other parts of South Africa, who from their distance from Headquarters in Johannesburg were debarred from receiving any office of honour in the Branch. Owing to the difficulty of making the Vice-President, President in the year succeeding his Vice-Presidency if not able to lead the Society personally at the Headquarters town, it was resolved on the motion of Mr. Alan G. Monsbourgh to refer the question to Committee for report to the next Annual General Meeting, to see if some more suitable arrangement could be suggested for adoption.

The Meeting closed with a vote of thanks to the Chairman.

MR. ROBERT J. McBeath, Architect of Sale, who recently won the Competition for the New Primitive Methodist Church, at Ashton-on-Mersey, has just completed the extension of the Sale Post Office, which has been built from his designs and under his supervision, at a cost of about £2,000; provision having been made for a Telephonic Exchange in view of the taking over of the telephones by the Government in 1912.

Mr. A. G. Howard, of Cape Town, supervised the erection of the Cape Arch, which was one of the four put up for the Union Celebrations and which was erected from his designs. It was a simple, artistic design, and formed the entrance to the Pageant Ground. The other three arches were put up in Adderley Street, but more decorative than architectural in design.

MR. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President) has been honoured by an invitation from the Municipal Art Society of New York to exhibit the drawings which he prepared in illustration to the Paper which he read before the Society in December last, entitled "A Great London Improvement Scheme," first at New York and subsequently at Philadelphia.

^{*} This has since been confirmed by the Council of the S.A. and is embodied in the Branch Society's rules.—Ed.

Fire Protection in the City.

Insurance Companies and Building Owners.

The Morning Leader expresses the opinion that it is a mistake to suppose that the buildings within the "danger-zone" of the City were, after the Cripplegate fire, rebuilt on modern lines, and quotes as its authority Col. Fox, Chief of the London Salvage Corps, and Mr. C. W. Surrey, Surveyor for the Western division of the City. These gentlemen do not appear to have any sure grounds for the statements attributed to them that except as to the streets not having been widened, which of course could not have been done without the consent of the L.C.C. It is also stated that one of the leading Fire Insurance Companies agreed with these opinions, and had in addition expressed the view that there was the same disregard for window protection that prevailed in this district before the fire referred to.

Mr. Percy Tubbs, F.R.I.B.A., Vice-President of The Society of Architects, in a letter published by *The Morning Leader*, points out that though it is true that the streets were not subsequently widened when reconstructing the buildings, in many cases fire-resisting floors were used with a view to minimising the risk of fire spreading. Unfortunately the fire insurance companies do not make adequate reductions in their premiums when improvements are made in new buildings, and as these cannot be made to show a sufficient return on the increased outlay under these conditions there is no advantage from the building owners' point of view in spending money on improvements. Where it has been possible to get a fire insurance premium reduced by minimising the risk the reduction is so small as to be no inducement.

Mr. Tubbs suggests that if the fire insurance companies would realize the importance of fire-resisting glass in exposed openings, and of steel and concrete floors and enclosed fire-resisting staircases, and make a substantial reduction in their annual charges within the "danger-zone," building owners would be prepared to incur additional outlay on the buildings. The London Building (Amendment) Act, 1905, requires that reasonable means of escape in case of fire must be provided for in a building occupied by more than twenty people, but as Mr. Tubbs points out it is hardly fair to say that the L.C.C. now insists on the employment of fireproof staircases, as in many cases the necessary means of escape can be provided by other methods, and the Act is concerned not in the prevention of fire but in the means of escape from the building.

Mr. Percy Tubbs expresses the hope that under the Town Planning Act it may be possible to have some scheme ready to be carried out as opportunities arise, such as was afforded by the Cripplegate fire, and he concludes by making a suggestion which will probably meet with the approval of all London architects, that what is now wanted is a consolidated building Act properly considered by interested parties, namely, the L.C.C., the Fire Insurance Companies and the building owners.

The Turned Lattice Work of Egypt.

By COLONEL F. S. LESLIE (late R.E.), Past Vice-President and Honorary Secretary of The Society of Architects.

T N reading a paper on the Turned Lattice Work of Egypt, it is to be feared that not much can be told you of any practical use, for its application to modern architectural works seems out of the question; climatic considerations would render it undesirable, and the requirements of modern civilization and English modern customs seem to forbid it. Although old examples are freely used as decorative agents in many London houses, they are not, and cannot be the integral part of the structure that they are in their native land. Firstly, because the owners, being ordinary tourists, have not as a rule the knowledge to enable them to place them in positions analogous to their original positions; Secondly, when they have this knowledge, the external and internal arrangements of London structures do not generally admit of it. They are, therefore, mostly used as curios, and being dissociated from their natural surroundings, have lost most of their decorative effect. Notwithstanding these disadvantages, they have a certain value. One house in London was known to have been partly selected for its capabilities as a setting for old examples, and they have been put in it in the proper way as far as it is possible to do so in a London house. Yet here the effect is not always congruous. Thus we here find (i.) a shutter hung, folding with bright brass hinges of most unmistakeable Brummagem make, instead of with rough, forged, wrought interlacing eyes or loops, the points of which are clinched on the back of the frame; the frames opening sideways and inwards, instead of opening outwards and upwards, or sliding in rough grooves in the frame of the opening, (ii.) old turned work made up into moveable three-fold screens, hinged as described before, are little points that indicate their use in dwellings that are not exactly suited to them. Nevertheless it is hoped that an account of the craft—to use an ancient term-may interest you from an archæological point of view, for as an art or craft it is almost extinct. It is hoped that somewhat new ground will be traversed, for although several works on Egypt treat of it, none of them enter into much detail. It is also believed that the subject has never been approached from a thoroughly technical standpoint. The lecturer may be considered to have had special advantages for studying the subject during a long service in Egypt. However a study of the mediæval development of the craft presents many features of interest from the archæological point of view, both as regards the artistic merit of the decorative effects produced, and the wonderfully dexterous manual skill of the ancient turners of Egypt.

Most writers on Egypt mention the craft, and some of them describe it to a certain extent. The best description is to be found in Stanley Lane Poole's Art of the Saracens in Egypt. But this account is deficient in technical detail. It would be right and fitting to trace back if possible its development to its very origin, from ancient manuscripts, native historical or technical works, or from tradition, but unfortunately Arabic literature is singularly deficient in any accounts of it. Egyptologists have been consulted on the subject, and can throw no light on it. The Mahommedan religion and the fatalistic turn of mind it induces are not conducive to archæological research. Tradition is equally silent; the turners of the present day have often been asked by the author their reasons for adopting some particular method or some special form. The invariable answer has been that their fathers and their fathers' fathers before them did so, and they copied them in the same way, and that their sons would continue the operation. If the reason for any new combination were asked, the reply would be, "The Lord wished it so," "The Lord put it into my head," or "It is my way." These replies did not admit of further questions. Poole states that no existing example of external work is probably older than the beginning of the 18th century. He is no doubt right, the nature of the material and its combination in small parts not tending to permanence. Moreover, there was constant destruction by fire, the flames leaping across the streets from balcony to balcony with great rapidity. As these were only renewable adjuncts of the buildings of which they originally formed part, it is difficult to assign an exact date to them. Fortunately, however, dated examples are in existence that carry us back several centuries further than the 18th century. There is some lattice work in the South Kensington Museum in a Mosque "mimbar" or pulpit, bearing the names and titles of the Mamluk Sultan Kaït Bey, who reigned from 873 A.H., 1468 to 901 A.H., 1496 A.D. The borders between the panels of the staircase of this pulpit are in turned work. In the Cairo Museum there is a "kursy" or tray stand that has small openings fitted with turned work. Its date is approximately determined by the style of the carving of some of the alternate panels which are solid with carving which is similar to the plaster arabesques in the Mosque of Sultan Hasan A.D. 1358. This stand came from the Mosque of Sitteh Kharwand Baraka Umm Sha' Ban, built in 1368. The stand may not be contemporaneous with the Mosque, but it probably is. Both of these are very fine specimens, and the craft was well advanced by this time. In the enclosure of Kalaun's tomb, 678 A.H., 1279 A.D. to 689 A.H., 1290 A.D., there is a rough heavy wooden screen, the voids or openings in which are filled with heavy turned balusters. Although there is no inscription on it to mark the date, the screen is probably contemporaneous with the Mosque. This takes us back two centuries more.

The next in order is perhaps the Kursy, in which we have the art in its perfection. The Kursy is the earliest example to which a date can be assigned with any probability

in which the distinctive Saracenic geometric pattern was applied to turned work We know historically that the luxury of the Mamluke Sultans stirred all the arts that had long lain dormant in Egypt into new life, and although so few examples of lattice work have lasted to the present time, we may safely infer that the art of the turner received a fillip with the others, and retrograded with them. The best period may therefore have extended from 1368 to 1516. The next example in chronological order is Kaït Bey's pulpit, bringing us towards the close of the possibly best period. Here we have quite a different style of lattice, which, though still geometric, is of a more rigid type and combined with chased or inlaid surfaces. Next we come to the 18th century work in the South Kensington Museum, a considerable quantity of which is still in situ in Egypt; it continues fine and vigorous but growing more delicate; and more intricate and lacey effects are produced, marking a step towards possible extinction. The lecturer has recently read a translation from an Arabic author. which states that when some European ambassadors were admitted to the presence of one of the last of the Fatimid Caliphs, they found him sitting on a golden throne which was surrounded by a golden lattice screen. (1094-5 A.D.) which may have been of turned wood gilded. It is also possible that a further examination of the historical surface sculptures of the Pharoahs in Upper Egypt may disclose the picture of a turner working in the same manner as those of the present day with similar tools.

The art of turning is expressed in Arabic, by the word "Kharateh," derived from the word "Kharat," a turner. The turners themselves frequently use the expression, "shughl Kharat," = "turner's work," or "shughl bita'l Kharateen," = "work of the turners:" the portions of the cities where the craft is exercised is called "suk el Kharateen," "Market of the turners," or "sicca el Kharateen," "street of the turners." "Meshrebiyeh" is the Arabic for the octagonal projection which is the usual adjunct of a latticed window, and is such a characteristic feature that the expression was applied by Europeans to all turned work, and was caught up by the natives. Two derivations have been suggested, one is from "shirib," = "to drink," with the prefix and suffix, it is supposed to mean "the drinking place."

As it is the custom to place the porous earthenware water bottles in these projections to cool the water by evaporation, this derivation is reasonable. The second derivation from Judge Scott's vocabulary is the more probable of the two; he supposes it to be from "mushraf," "projecting from," with the suffix it became "mushrafiyeh," "something projecting," and from this it was corrupted to "mushrabiyeh," ba" (b) and "fa" (f) being frequently interchangable.

The body of turners is not corporate as our guilds are, but it is more of a trades union, which is governed by oral tradition; the practice of the craft is transmitted from father to son or from father to nephew, and perhaps also to a few relatives who were trained as apprentices, commencing from earliest infancy; one sees boys of eight

and nine working at the lathe, and working with a considerable amount of skill. There is good reason to suppose that the turners are of mixed Coptic descent; they have most of the racial characteristics of this people, though now Mohammedans and dressing as Moslems.

Generally speaking a lattice of Egyptian turned work consists of :-

- (1) An ordinary frame of scantling of any dimensions up to the marketable lengths and scantlings of timber, generally moulded on the inner edges, styles and rails halved and pinned with hard wood pins; the parts of the frame were often mortised and tenoned in the usual way and sometimes housed as well. This outer frame may be called a binding frame for the cohesion of the several parts of a lattice depends upon it.
- (2) A given number of rails or transomes are turned in the lathe and shaped by cuts of varying depth and character to suit the fancy of the craftsman, all the rails being similar and equal in length, and both ends finished cylindrically to fit into corresponding holes in the frame equal distances apart.
- (3) Smaller pieces of wood, varying in length from a quarter of an inch to 3 or 4 inches, with the ends diminished as before, fitting into corresponding notches drilled in the turned rails, employed to keep them apart and prevent them from sagging, and therefore hereinafter denominated distance pieces. It will have been noticed that the rails are usually placed horizontal and that they are equal in length to the shortest dimension of the frame. Some of the lattices, although ancient, still fit together so closely that it is difficult to distinguish between the different parts. One lattice is further adorned by two rows of little balusters, a given number in each row; in this case the plain rails are increased in number from two to four. The next have diagonal filling-in pieces, dextral, sinistral or alternating, partly filling the blanks in the rectangular work, which in another example are completely filled by the addition of two more little turned filling-in pieces. The lattice here illustrated,

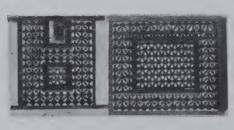


Fig. 1. Fig. 2.

produces quite a different design (see figs. 1 and 2 parts within inner frame); by the formation of a head at each end of every alternate turned rail, which has the effect of placing their thicker parts opposite the thinner parts of the rails without heads. This arrangement does not require filling-in pieces, only right handed and left handed distance pieces.

It will thus be seen that an infinite number of designs can be produced by the combinations and arrangements of these several parts; a lacey pattern can be produced

round the inside of the binding frame; rough representations of objects can be obtained, such as a crown, the seal of King Solomon, a chalice, a hanging lamp with chains, a "goulah" or water bottle, and even an inscription in the Kufic or rectangular Arabic character. A further infinite variety can be obtained by the nature of the cuts on these different parts, so that a longitudinal section may pass through parts that are cylindrical, ovoidal, discoidal and conchoidal, with every here and there a sharp arris; of course every cross section through any piece will be circular as may be expected as regards an article turned in a lathe. The external dimensions of the foregoing lattices range from about 12 inches by 9 inches to about 4 feet by 2 feet 6 inches; the latter are used to close window openings, and the former as hinged shutters in large external screens. A screen in the possession of the lecturer has a shutter which was practically only a peep hole, for it measures no more than 3 inches by 2 inches.

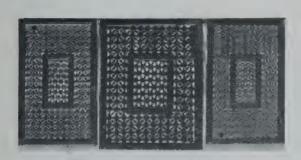


Fig. 3.

Fig. 4.

Fig. 5.

Another way of putting these parts together is shown in figs. 1, 2, 3, 4 and 5; the four parts indicated form another frame which may be from 2 inches to 12 inches inside the outer frame, its rails are the full width of those of the latter, about half the thickness is cut out of the ends of the styles and then mitred and passed over the rails the front and back surfaces of which are prepared to receive them by cutting

away at the proper places, sinkings which leave sufficient thickness of wood for insertion into the housings in the ends of the styles; the ends of the rails are not considered finished until two, three, four or more knobs or excrescences are formed on them in the lathe, their number and nature varying to suit the description of the remainder of the work: the spaces between the two frames are filled in with turned pieces generally as hereinbefore described, however there are four minor unimportant differences that are only remarkable on account of their ingenuity: they cannot be usefully explained without diagrams. Although this system evidently admits of a certain amount of extension, practical considerations no doubt prevented it, for the difficulties of assembling the parts of the lattice referred to must have been cosiderable, and they might have proved insurmountable had an attempt been made to put one or more frames outside the inner frame. Fig. 6 shows another development, being a combination of turned pieces as before in a moulded frame

The Turned Lattice Work of Egypt.



Fig. 6.

which in this case is morticed and tenoned into the outer frame, sufficient of either rails or styles being cut away in the parts between the two frames, to admit of a lacey border of

turned pieces to pass round and enclose the inner frame, the parts of the border are disposed diagonally in two directions one set being moulded distance pieces, the other set are cylindrical rectangular bars moulded and turned at equal distances equal in length to the distance pieces, feathers are shaped on the ends which are held in grooves made all round the frames. The lecturer possesses several screens made in this way, one of them is 13 feet long and 25 inches wide; it came out of a house in course of demolition in Alexandria, where it formed the lower part of a "mughana" or arcaded musicians' gallery; it has five inner frames mortised to the outer frame and the border passes continuously without a break all round them all. This arrangement is well shown

DIVAN SCREENS FROM AN OLD HOUSE IN ALEXANDRIA.



Fig. 7.



Fig. 8.

in the illustration marked (fig. 7), which is a representation of one wing of a divan front, from an old house in one of the oldest native quarters of Alexandria; this is a rare case of thin frames within one another; unfortunately the panelling in the middle portion which is not turned work at all does not show up well, the

photographer must for some unknown reason have stuck strips of paper diagonally across it; fig. 8 being a view of the back explains the general system of framing, and also shows where the panels should appear on the front view. The house whence this came is said to have been between two and three hundred years old. Fig. 9 is a very handsome window rescued from a ruin in Alexandria, the contrast between the delicate border and the bold open work of the upper part is very effective, and the two rows of balusters at the bottom are very appropriate and add considerably to the effect. It must have appeared very fine *in situ* with perhaps the minaret and dome of another mosque and waving palm tree visible behind it. Every part of the framing abutting on the border is grooved to permit of the different parts being Window from Mosque of Sidi Sabhet, shipped into position as already described. There

ALEXANDRIA,
DESTROYED ABOUT 1882.

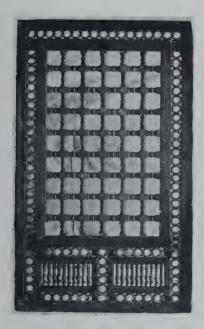


Fig. 9.

is one remarkable detail about some of the pieces of the border, to obtain rigidity they are centred twice on the lathe and turned on two parallel axes, and the intervening parts finished with a chisel. This window's external dimensions are about 6 by 3 ft.

Irrespective of pattern or design, a great characteristic of the work is the smallness of the parts. The origin of this smallness is undoubtedly to be found in climatic considerations, as the carvers limited the size of their panels to prevent them twisting from the hot sun, so did the turner adapt his work to counteract this influence. The fitting together of small pieces as described, and the freedom to slide in grooves, gave the work a wonderful adaptability, and allowed for a large amount of twisting of individual pieces without fracture and without change of general outline and form in the design. In many particulars the disposition of material in the various parts, and the arrangement

of these parts were eminently constructional.

The manner in which the parts are assembled gives a cross-fibred arrangement of wonderful strength; the holes drilled for the insertion of the distance and filling-in pieces occur only in the bulbous parts. No screws, nails, glue, white lead or other adhesive materials were used. These ancient craftsmen employed many other ingenious devices which indicate thorough knowledge of constructional needs, and of the capabilities of the material they worked in. It has been stated that there are lattices which have 2,000 separate pieces to the square yard, but this statement is

somewhat of an exaggeration, the lecturer has never been able to discover more than 1,433 to the square vard. The shutter exhibited measures 12 inches by 93 inches. and contains 54 separate pieces; another one, measuring about 2 feet 6 inches by 18 inches, contains 259. It might be supposed, from the number of small parts used. that this sort of work would not be durable, but it must be remembered that there is no frost in Egypt, nor was there any rain until about 50 years ago; even now there is very little rain in Cairo, so the weathering agents that would destroy such work in a very short time in such a climate as ours are absent from the climate of Egypt. The only weathering agent there is blown sand, which does nothing more than remove a little of the softer parts of the annual rings. Like so much other Saracenic work, the lattices exhibited and described are geometrical in design, the intersection of the axial lines forming stars, combined with equilateral triangles, hexagons, squares, lozenges and rhombuses, indicating a considerable knowledge of plane geometry on the part of those ancient craftsmen. The only example of an octagon known by the lecturer occurs in the border of the window from the ruined Mosque of Sidi Sabhet (see fig. 9).

The wood mostly used in the 17th century work was Turkish or Caramanian pine from Asia Minor, a highly resinous pitch pine, sometimes teak—no doubt from India—and oak, pear, beech, and elm; none of the woods used grew in Egypt, they were all imported. The woods now used are oak, beech, pear, sycamore, teak, walnut, lemon, and sometimes Turkish pine, not often, as it is not suitable to the small work now in vogue. The lecturer has seen a turner use a hard knob of "sant," a species of mimosa. This last is the only one of the number which is indigenous.

The tools used are the "mahratta" or lathe, the "kursy" or stool, the "kos" or bow, the "mifhar" or gouge, the "ismeer" or firmer chisel, the "hadid" or iron bar which is used as a hand and foot rest, the "farah" or smoothing plane, used to reduce the thickness of the turned pieces by planing two sides for extra delicate work, the "mitkab" or drill, a piece of pitch, used as a bed when drilling, and a piece of skate skin, used instead of glass paper, and a stool for the turner to sit on. The lathe mostly used is a very rough thing. It is believed to be very much the same pattern as the lathe used about 4,000 years ago.

We now come to the consideration of positions in the structure. Of course the most beautiful and striking use is in the big projecting oriels with their octagonal projections. Some small openings were entirely filled by projections of this sort. Next we come to rectangular openings or windows; these were the only purely external uses; the latter in both mosques and dwellings, the former in dwellings only. Gallery screens and windows occur round the interior courtyards of dwellings; high screens occur in the interior of houses, dividing passages from one another, such as the screen dividing the private passage to the master's room from the "mak'ad."

Mushrabiyeh also occurs in Alexandria, in the gallery and dais screens alluded to before; in mosques in the pulpit stairs and round tombs; in Coptic churches, in doors and chapel screens. It was also used to a limited extent in furniture, such as the "dikkeh," or bowwab's or door keeper's seat, in the two kursys or stands, one for the Koran, the other for the dinner tray (see Lane's Modern Egyptians, Vol. I., pages 181, 182). It will be seen that this manner of filling an opening was eminently suited to local customs, it tempered a too lurid sunlight without offering obstruction to the free passage of air; it screened and isolated the women, as was required by the customs of the country, without entirely shutting out their view of the functions or processions that might be going forward in the street, it admitted a view of the "fantasias," when such were taking place in the inner courtyard of the house, possibly the favourite wife occupied the octagonal projection; nothing could be seen by the women through these lattices, except by pressing the face against the bars, and even then it is admitted that not any very extensive view was obtained, however, no doubt it was as much as their lords and masters thought was good for them; as all windows on the street were at such a level from the ground as to prevent a man riding a camel

CAIRO. VIEW IN THE MUSKI



Fig. 10.

from looking in, nothing behind them could be distinguished from the street except as an indistinct mass. When placed round tombs it allowed visitors to view the holy place without defiling it by too near approach. (See figs. 10, 11 and 12.)

According to Lane it was a considerable industry in Cairo in the early part of the 19th century, but was then inferior in style to the old work. According to Prisse d'Avennes the craft was extinct in Cario in 1840, and the then modern specimens were supposed to have come from Arabia, principally from Jeddah. This is possible, though not probable, otherwise the rapid revival of the last few years could not have taken place.

The causes of its final decadence, which may date from the early part of the 19th century, are no doubt to be found in the increased intercourse with Europe, and the

introduction into Egypt of sheet glass for sashes, which induced a desire for houses in European style, and badly fitting French casements took the place of the lattice work. A great many of these casements have sliding external shutters, filled with crossed laths. Their appearance is very mean as compared with that of the old

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The Turned Lattice Work of Egypt.

Cairo.
Courtyard of an Arab House.





Fig. 11.

Fig. 12.

turned work. Ismail Pasha probably gave it its death blow. The pashas and notables of his time followed his lead in the production of lath and plaster palaces. with exuberant ornament in the very worst style; the old houses descended to the lower orders, who were too poor or too careless to make alterations. It may be due to this fact that any "meshrebiyeh" is now left in Cairo. The overland route brought Egypt to the notice of travellers. The charming works of Lane Poole, and others aroused interest in the arts and customs of this country. Tourists, according to custom, desired to take away with them some memento of their sojourn in this strange land. None could have been more oriental and characteristic than "meshrebiyeh." This desire created a demand for lattice work, and the languishing art of the turner received a fresh impetus, but in quite a new direction. The necessities of this demand required portable articles, and a new style was produced as modern and emasculate as the old was bold and vigorous. It is now no longer an adjunct of architecture, but has been reduced to the lower level of ornamental upholstery, for European use only. Upholstery, as understood and decoratively employed in Europe, is not even now an Egyptian domestic requirment. The furniture of the best houses is still of a very limited nature. articles now mostly made are picture and photograph frames, fire screens, door screens, tea tables, book stands, sofa and chair backs. These articles are pretty

The Turned Lattice Work of Egypt.

enough in their way, but it cannot compare with the old. All the parts are necessarily smaller and less vigorous; the art is no longer now the outcome of local requirements, but is almost entirely practised for export trade only.

It is somewhat remarkable that the art should have been practised as late as the 17th century. According to El Gabartee, Sultan Selim II., after the conquest and annexation of Egypt by the Ottoman Turks in 1516, took away with him to Constantinople so many masters of crafts from Cairo, that more than fifty manual arts ceased to be practised there (see Lane's "Modern Egyptians," appendix F). However, the turner's art does not seem to have been one of them. In the first place there is not now, nor is it believed that there ever was any "meshrebiyeh" in Constantinople, and it is known that its practice was continued in Cairo after the date mentioned. It is evident that the 16th century turners managed to evade attempts at deportation. This stay-at-home quality is somewhat a Coptic characteristic.

In conclusion, it might be desirable to notice shortly the geographical range of the art. It had a very limited range even in Egypt: Cairo, Alexandria, and Rosetta being the only towns where any considerable quantity of it can be found at the present time. There might be some at Damietta, Tantah, and other similar large towns; if so, it only occurs in isolated houses. There is a little in the Soudan at Suakin, a little in Arabia proper at Jeddah; there never was any in Morocco. It is believed that this statement applies to other Mahommadan countries, Spain, Algeria, Tripoli, Turkey, Persia, India, Syria, This is a most remarkable and inexplicable fact, for it was a well-known custom of Mahommadan rulers to send to one another presents of slaves who were craftsmen. The Egyptian Sultans and Caliphs received many such importations, and in return sent some of their own artists to co-religionist sovereigns. The lecturer was once told that some of these lattices exist in the Alhambra at Granada. From the foregoing one would reasonably expect to find them there, as well as in all other countries that had been occupied by the Moors or by the Arabs. At the same time it is believed that there never was any there; at any rate none is reproduced in the very faithful model in the Crystal Palace.

The "Cheap" Churches.

Mr. W. D. Caröe, F.S.A., F.R.I.B.A., in an article in the Church Builder, says the "cheap" church is entirely of modern origin. Our church-building ancestors, who may be said to have invented and developed for us the type of building which so materially influences our designs and methods, never indulged in unsubstantial work erected chiefly because of its cheapness. They worked under a continuous tradition which had its best development in church buildings, and made them beautiful, substantial, and solid. This statement is consistent with the fact that these great builders many times began a work which they had not the means to complete on the scale of magnificence contemplated at the outset. In such cases a simplification of detail took place; a vault perhaps was omitted and a wooden roof erected in its place. But still, the work finally accomplished was never "cheap." Again, there were instances where the building materials more usually desired were too costly to come by owing to difficulties or distances of transit, and they had in such cases to put up with such inferior materials as they could collect on the spot. A large part of their art consisted in the suitable use of such local material. We find notable examples where piers, arches, and every part possible are erected in the roughest rubble masonry plastered over. Dressed stone is used in the smallest possible quantity only where, as in window traceries, it could not be dispensed with. But in such cases the pillars, being comparatively weak in construction, were made stout and sturdy and extra thickness was given to the walls. Here again we cannot accuse them of cheap building.

Cheapness not Economy.

Cheapness seems to have begun when traditional architecture died out. Some of the churches erected towards the latter end of the 18th century were essentially cheap, and cheapness was rife in the early part of the 19th. In latter days it has been held in check only by such societies as the Incorporated Church Building Society, and to a lesser extent by the Ecclesiastical Commissioners.

Economy, the author contends, is not necessarily cheapness; this is the distinction to be made clear, for the two are in fact wholly opposed. Experience tells us that cheapness in building involves with unerring certainty dearness of upkeep. Cheap building is invariably bad building, and for the results of bad building there is no remedy save demolition and starting afresh, when at length funds and patience alike have been exhausted in the fruitless effort to heal running sores.

Now there are, nevertheless, those who promote the building of cheap churches, and influence ignorant committees unable to distinguish between cheapness and economy. As cheapness and vulgarity seem to run in harness, it is not surprising

to find the art of self-advertisement, for which the press of to-day affords such ready facility, frequently resorted to in this association. Such advertisement generally takes the form of a promise of a church at so much a sitting (a wholly fallacious standard). In the outcome the promise is frequently unfulfilled, but if fulfilled, it is only by sacrificing essentials. But whether fulfilled or not, there is the same special puff in the ear of the local reporter, when one of these structures receives episcopal benediction.

The Stereotyped Design.

A study of churches of this type is worth making. It will be found that each and all of them come in each individual case from a brain which has not two ideas. Precisely the same set of plans and details and the same specification are used again and again, no matter what or where the site or the locality. At the very outset this bespeaks economy of production in favour of the producer, but the lack of it to the payer, because the cost of materials and their lasting qualities vary with the locality. The specification is, moreover, apt to be of the meagrest and most inadequate type, with large provisional sums reserved, so that, in the event of a breakdown in price in any locality, some alternative material like cheap terra-cotta may be substituted, no matter how unsuitable.

As far as granting and approving authorities are concerned, the design manages to run the gauntlet of approval with the narrowest possible margin, but having done so is loudly belauded as having secured what is represented as cordial recognition. As a fact the same stereotyped design is submitted again and again and the same faults are pointed out by granting authorities ad nauseam and with difficulty secure correction, though apt enough to appear again in the erected building. It is one of the curious facts connected with the revision of design that the worse the design the more stiff-necked is its author in consenting to amend it.

Again, the class of design we are considering is generally of that garish and showy type abounding in fussy architectural features, thoroughly poor in themselves, but devised to catch the eye of the uneducated in these matters, who predominate on many building committees. It tries, with small success it is true, to found itself upon the past, and is apt to provide capitals and bases and tracery and mouldings, all those features which remove the architecture of the past out of the sphere of cheapness. In trying to give these things cheaply they are given badly, while at the same time matters of more importance are sacrificed.

The Qualities of Economical Architecture.

All the time the money thus squandered might have been spent upon genuine, creditable and economical architecture, the qualities of which may be briefly set forth as follows:—

(1) The use of suitable and, if available, local materials in a simple and direct manner, as best suits their nature. This requires much more art than is usually

displayed in the class of buildings we are considering. Appropriate style, in fact, really depends upon it.

- (2) The disposition of the materials so as to secure the greatest possible solidity and stability in relation to the amount of material used.
- (3) The special adaptation of each design to the site upon which it has to be placed, and also to the needs of the climate and surroundings.
- (4) The securing of architectural effect and interest by simple lines and good proportions rather than by elaboration of detail.

Reticence in design and harmony of parts go far to produce the element of solemnity and inspire that sense of reverence which ought to be present in every building devoted to the service of God.

Review.

Architectural Copyright. A comprehensive handbook, edited by Lawrence Weaver, including a correspondence from Country Life, three appendices and an introduction by John W. Simpson. Published at the Offices of Country Life, 20, Tavistock Street, Covent Garden, W.C. Price, 1s.

Those of your readers who are not already familiar with the Bill "to amend and consolidate the Law relating to copyright "which was introduced into the House of Commons last session, will read with great interest the little work just published by Country Life. Mr. John W. Simpson, F.R.I.B.A., who has written the introduction, is Chairman of the Copyright Committee of the R.I.B.A., and is perhaps the greatest authority we have on the subject, and owing to his great ability and energy the Bill has been largely remodelled so as to properly protect Architects and their works. It is important that all practising Architects should be well acquainted with the proposals affecting their interests, and they should certainly take the opportunity of familiarizing themselves with the subject by reading this excellent little work, which puts the matter clearly and concisely before them in an interesting way. The reprinted letters which appeared in Country Life from well-known Architects set out very clearly the pros and cons of the case, and in the appendices some interesting information is given showing how the proposal to protect architecture came about, and also some decided cases that have been settled in the Courts abroad. All architects will, I feel sure, agree with Mr. Blomfield where he says: "It is something to have architecture recognized as an art in this country," and the Bill as amended should have the desired effect when it becomes an Act of Parliament.—Percy B. Tubbs, F.R.I.B.A.

The Architect as Gardener.*

In dealing with the subject of "Garden Design," Miss Dunington emphasized those points presenting the greatest difficulties to the designer whose education has been almost entirely architectural, and who therefore is somewhat biassed in favour of bricks and mortar and whose knowledge of horticulture is possibly nil.

Viewed architecturally, the true purpose of a garden is entirely subservient to the building it surrounds, and therefore, it should be in harmony with it in style and design, but yet, after all, this is a garden in the most restricted sense. Its value does not lie in the intricacy of its design nor upon the money expended on its construction, but rather its merits may be measured by the degree of its beauty and utility combined—utility and art are and have always been inseparable, and therefore, if the former quality be absent the latter is degenerate. This is true not only of gardens but also of buildings. It does not matter how magnificent the exterior of a building may seem to be, if it does not faithfully fulfil the purpose for which it was intended it cannot be described as a true work of art—and the same may be said of a garden.

The most successful lay-out is the one which, when finished, looks so obvious and unobtrusive in arrangement that it would be difficult to picture it otherwise. One of its uses, if not its chief use, is to link together harmoniously the sternly artificial and the purely natural, and this is possible because within itself it has the power of dual expression.

The designer's skill lies not so much in destruction as in construction and the individuality of a garden depends largely on existing features, and natural characteristics. In dealing with an established garden one has to readjust one's ideas to meet the peculiar requirements of the house and its surroundings. The size of the forecourt may have to be curtailed in order to preserve some fine old tree, a path may need to be diverted to avoid the uprooting of a rare shrub, and so forth. The "clean slate" method is undoubtedly the easier, but even when dealing with a new site, the designer should weigh carefully in the balance the removal of a single tree.

It is essential to pay considerable attention to the main entrance to the grounds from the road, as it is here that the visitors gain their first impression of the house and garden. The drive and forecourt should be quiet and subdued in design, with just sufficient well-thought-out colour to suggest cheerfulness and good taste. Anything approaching ostentation should be strictly avoided. When, however, we come to deal with the garden proper, we can allow ourselves a greater licence, colour must abound, and the design, now less restricted, should offer the fullest opportunities to the gardener for the orderly grouping of trees and the artistic arrangement of the flowers.

^{*} Summary of a Paper on "Garden Design," read before the A.A. Club,

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Although there are certain broad principles on which garden planning is undoubtedly founded, yet it is impossible to lay down any hard and fast rules as regards design. Each site suggests its own requirements and each building its setting and style. The skill of the designer lies chiefly in making the most of existing features, in the overcoming of difficulties, and in preserving a sense of individuality untainted by affectation.

Some Common Faults.

Over-elaboration is the commonest fault of the beginner. Most plans from the 'prentice hand contain sufficient special facilities for half-a-dozen gardens. The overcrowding of ideas results in a feeling of unrest somewhat similar to that produced by over-much pattern in a living room. Another point to be remembered is that a garden is not an architectural museum. It can be in perfect harmony with the house and still be devoid of masonry and statuary, and unless the latter be really good it is better absent. There are a few who realize to the fullest extent the value of a wellformed grass bank of simple geometric design or who are conscious of the beauty of the shadows it may cast in the sunlight. But here again there is frequently a point of difference between the architect and the gardener. The former, thinking mainly of design, is apt to make his banks too steep, and the excuse for his doing so is that the more nearly the slope approaches the perpendicular the better is the design defined and the deeper are the shadows cast. The gardener, on the other hand, being concerned chiefly with the future care of such banks, including the cutting and rolling, tends to make them too shallow. The thing to be aimed at, is a happy medium between the two.

On falling ground something in the nature of a terrace is essential in order that the house may have a fitting base, but each site has to be treated individually and it is therefore impossible to make unbreakable rules concerning them. Broadly speaking there is a decided tendency to make them too narrow. Although terraces are essential in certain positions, many a beautiful view has been lost by constructing them needlessly—sloping and naturally undulating land frequently has a beauty of its own which is worth retaining—the design should be made to suit the garden and not the garden the design.

Some Misused Features.

Gardens, being less permanent than buildings, are more influenced by passing fashions. No garden is considered complete without a "pergola," and we see this unfortunate alien from Italy erected in almost every plot of ground large enough to take it. If there be no south slope available for it and its roses and vines, then it is placed on the north and covered with ivy. A sad and useless object leading from nowhere to nowhere. The sundial is another feature much misused. Redolent of

The Architect as Gardener.

a past age, it suggests itself as a centre-piece for an old-fashioned formal garden. Yet how often do we see it set up in "Suburbia" with nothing to link it to its surroundings. But still more incongruous is it when one meets it in the forecourt of a public building or a London soot blackened garden. One of the subtlest ways in which affectation can creep into a garden is over the carrying out of architectural features. Architecture introduced into the garden should be, as far as possible, of similar materials to those used in the construction of the house. With the house built of Bargate stone quarried probably on the site, garden walls to match, paths of beaten sand and flower beds of warm brown earth, what could be more harmonious in its conception? But what is suited to the Surrey pine woods would be out of place on the chalk downs of Kent, or the clay of Middlesex.

Ready-made Antiquity.

At the present moment there is a revival of the gardens of a couple of centuries ago. But owing to the impatience of the age there is also a desire to reproduce "ready-made antiquity," and here Miss Dunington puts forth a word of warning lest we find ourselves guilty of some of the practices of the much abused landscapist of the 18th century. They built ruined castles, we build garden walls of rustic appearance with wide mortar joints routed out to give a picturesque effect. Selfishness is written large on our work: we build for ourselves and not for those who come after us. What is more delghtful than an old walk paved with York flagstones? Age has mellowed and frost and rain broken it asunder, vegetation has sprung up in the crevices and the whole is sweet with memories; compare this with the handiwork of the modern man, who first lays a discarded London flagstone and then shatters it with a hammer that it may present a crazy as well as an antique appearance. This is affectation and retrogression in garden craft. Let us take the best of what has gone before, and then with sound materials proceed to greater attainments. In the Tudor Garden at Hampton Court, the paths were recently paved. The "good old times" were all very well for those who lived in them, because to them they were new. We live in the *present* and the present is big with opportunities, therefore we have no occasion to perpetuate decay.

The Influence of Materials on Design.

Even a superficial study of the history of architecture is sufficient to convince everyone on the enormous influence that materials have on design, and if this be an acknowledged truth with regard to buildings, should it not also apply to gardens? The study of materials is considered an essential part of an architect's training, and rightly so. What then would be thought of a man who while professing a knowledge of building scorned all intimacy with the materials of which his building was constructed? Yet this is precisely the attitude of many an architect towards the garden.

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Of what avail is a design, however beautiful on paper, if it is unsuited to the successful growing of flowers and trees. In the garden more than anywhere else, materials control design. How then can anyone design successfully if they have no knowledge of the materials which are necessary to the carrying out of their ideas. A greater application to the study of horticulture is necessary in all those who aspire to the art of garden planning.

The popular belief that no special training is necessary for the successful laying out of grounds, that it can all be done by the light of nature, exists only in England, but in America, where architecture begins to hold a high place "Landscape Architecture" as it is there called is a recognized university subject. The Harvard University has a department for Landscape Architecture, so also has the Cornell University, and I understand that several other similar institutions now offer a landscape training to their students. The course, which extends over a period of four years, deals with the subject very fully from both its architectural and horticultural aspects. In England, the Liverpool University has made a step in the right direction by opening a department for Civic Design; but this is not sufficient—we must not rest content until an efficient training in garden as well as civic planning is considered essential to all those who undertake the carrying out of such work.

Examinations for Membership.

An Examination to qualify for membership will be held by The Society of Architects, in London, Manchester, Cardiff and Oxford, on April 11th, 12th and 13th, 1911.

Entries close on March 28th.

Students of the Society may take the examination by sections at a fee of 15s. for each section, or in the case of students who are 21 years of age or over, the whole examination at one sitting for a fee of one-guinea-and-a-half.

Certificates of proficiency will be awarded in those sections in which a Student candidate qualifies, or a full certificate as the case may be.

A holder of the four sectional certificates of proficiency issued by the Society, or their equivalent in certificates of exemption, who has attained the age of 21 years, may apply for the full certificate entitling the holder to make an application for membership.

Syllabus and entry form on application to the Secretary.

Registration and City Architecture.

Mr. H. C. W. Blyth, M.S.A., in a letter published in *The Builder*, referred to the suggestion made by Mr. Paul Waterhouse before the R.I.B.A., that the architectural developments of London should be placed under the control of official architects, one of whom should be appointed by each Borough Council, and that the appointments should only be made for a short term of years, and given to men who are in practice, provided they do not do so in their own district.

He appears, says Mr. Blyth, to have been thinking only of the centre of London, but a little acquaintance with the great suburban boroughs and the larger country towns would have shown him that the need of such appointments is much greater there.

His scheme is, therefore, of necessarily wider application than he seems to have imagined. It is an ideal worth working for, but impossible to confine to one small district only. Once extended in this way to include the whole country, it would soon be found to be impossible to make the appointments other than permanent, and that it would be necessary to require the officials to devote their whole time to the work, for there would be plenty of it for them to do.

Heavily burdened as the country is at present with rates, it is inconceivable that any measure would pass into law at the present time which would involve the appointment of a number of officials whose salaries would have to be found. The country is not ready to accept any such suggestion. As architects, we all recognize that something is needed to be done. There is a good deal of talk about the preparation of a Registration Bill by the R.I.B.A., as a sequel to the establishment of the Licentiates.

A Bill with a similar object has long been before the profession. The passage of either measure would insure that all architects in future should be in possession of at least competent knowledge and skill.

A great deal of what would be accomplished by Mr. Waterhouse's officials could be done at once if the Registration Bill which is eventually passed were to contain a clause to the effect that no drawings submitted to local authorities for building work should be valid unless they were signed by registered practitioners.

This would insure that at least the drawings had been supervised by a trained architect, and would, to a large extent, do away with the present scandalous state of affairs, which we country architects probably recognize more fully than those who are engaged upon bigger works in London.

The Journal of The Society of Architects.

Competitive Tenders in Reinforced Concrete Work. The Architect, the Specialist and the Contractor.

In a paper read by Mr. R. W. Vawdrey, B.A., ASSOC.M.INST.C.E., at a meeting of the Concrete Institute, it was pointed out that the specialists had usually to undertake free of charge to prepare preliminary designs for the structure in accordance with the general conditions required by the engineer or architect, and to prepare lists of quantities upon which contractors can tender, and be financially responsible for the accuracy of these quantities, *i.e.*, be prepared to pay the value of any omissions which may occur. He had also to accept financial responsibility for the stability of the structure.

The grievance lay in the fact that the specialist should be asked to do it for nothing, and at the same time that a large number of his competitors were doing the same thing.

The preparation and guaranteeing of quantities at a preliminary stage of the work, was also most objectionable. So far as he was aware, to invite tenders for the construction of a building which had not yet been designed was absolutely unheard of when any material other than reinforced concrete was being considered. The most that was required in such cases, even when competitive designs were invited, was for an architect to produce his scheme as a whole, on the understanding that the successful competitor would be subsequently employed to carry out the work or that the successful design might be purchased at a fixed price.

But the case of the reinforced concrete specialist was far different. He was invited not only to prepare a design, but to do so in sufficient detail to enable a number of contractors to tender for its construction, and it was for this purpose that it was usually necessary, in addition to the preparation of the design to issue complete quantities. This was detailed work which ought not to be done until after the adoption of a particular design, and which should be paid for by the client, as it would be in almost any other circumstances.

It was the underlying objection to the necessity for a specialist which had led to the confusion of the specialist designer with the contractor. This was, in his opinion, the root of the evil, and the remedy appeared to be in a dissociation of competition in design and competition in price. These were now almost invariably combined in one.

If this combination could be avoided he was convinced that it would be better for the specialist designers, the architect, or engineer, and the owners of reinforced concrete structures alike

The procedure which the author advocated was that when it was decided that a particular structure should be carried out in reinforced concrete, in all ordinary

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Competitive Tenders in Reinforced Concrete Work.

cases one reliable specialist firm should be asked to prepare preliminary designs and an estimate of cost, on the understanding that, if that appeared satisfactory, that firm should be employed to prepare complete working drawings for a definite fee, previously arranged, just as such drawings would be prepared by the engineer or architect himself if the material were brick or masonry or mass concrete, for which no specialist was necessary. When these drawings had been made and approved, and not before, tenders for the construction of the work should be invited from contractors. But, just as on certain occasions it might be desirable to invite competitive designs for, let us say, an important masonry bridge, so it might be in the case of a concrete structure, and a few firms should then be invited to prepare designs in competition. Where designs were invited in competition a sum should be provided for payment to the unsuccessful competitors, as was frequently done in architectural competitions.

Sir Henry Tanner, I.S.O., F.R.I.B.A., is apparently of the same opinion, for in a paper before the Royal Sanitary Institute, on the new General Post Office, he says, "Having had experience of several methods of procedure in regard to reinforced concrete work, he can come to no other conclusion than that the method pursued in this case is by far the best. It is of the greatest possible advantage that the architect and the engineer should be able to work together, and this cannot be done when designs and tenders are called for. Besides, it is obvious that with such procedure, if the engineer and his contractors are to hope for any success in competition for work. the steel and concrete must be cut down to the minimum, thus increasing the chances of failure. Much time is lost in the necessary examination and comparison of the designs submitted, and this, with vacant sites, means the loss of more or less money. Such a course is not taken with ordinary steel construction, and it is not usual to ask architects for designs and tenders which would practically amount to the same thing. Moreover, under such a system it is impossible to obtain a satisfactory schedule from which variations can be properly valued. The time must come when reinforced concrete will be incorporated in the ordinary bills of quantities and dealt with in the same way as any other part of the construction, and there are now any number of contractors quite able and willing to undertake and to carry out such works in a satisfactory manner."

Correspondence.

To the Editor of "The Journal of The Society of Architects."

re Provision in Flat Property, Tenement Workshops, etc., for the Accommodation for Electric Lighting Mains and Services.

SIR,—My Association have directed me to write to you, to draw your attention to a difficulty that occurs from time to time in large blocks of flats, etc., owing to the non-provision of any suitable space in the building for the entrance and accommodating of electric lighting mains and services. In some cases the lighting authorities have been unable to bring their cables in any suitable position till alterations were effected.

Moreover, where large blocks are sectioned off, either as flats or workshops, some suitable form of conduit should be built in between the various sections, in order that extensions of the service leads for motive power and lighting may be readily dealt with by the drawing in of further or larger cables.

In flats, where electric heating and cooking are now becoming so general, the provision is very necessary as a second pair of leads to the meter is needed.

I should be glad if you would put this matter before your Members, and my Association would much appreciate your co-operation.

Electricity Works,

Tottenham Lane, Hornsey, N.,

February 14th, 1911.

Yours faithfully,

NORMAN STANILAND,

Hon. Sec., Associated Municipal Electrical Engineers

(Greater London).

An Appreciation and a Growl.

Sir,—It is not often I trouble you with correspondence, but I really must congratulate you upon the steady improvement of the *Journal*. It gets more interesting every month, and I now take it up with pleasure. I think the President's straight talk to the Students is splendid, and will not only do a lot of good to young architects but older ones.

I am watching the Registration movement very closely and begin to see the faithful work of the Society bearing fruit at last. There will never be the slightest chance of a bill passing until the Institute and the Society can go before the House with a solid front.

I have become alarmed lately at the frequent actions brought against architects through dry rot, and this case of Mr. Trollope's adds to it. It is time architects protected themselves in some way, and I believe you sent out some time ago some memoranda on the subject.

Will you pardon just one growl from an old member. Every time I pick up the *Journal* I shudder when I see the deformed female depicted on the Society's seal. Our Society should be above tolerating such awful drawing.

Yours truly,

Sketching Tour to Italy.

A tour is being organized for the purpose of architectural study in the north of Italy under the leadership of Mr. G. A. T. Middleton, A.R.I.B.A. (Past Vice-President S.A.)

The party will leave London late in the evening of Wednesday, April 5th, returning on the morning of Wednesday, April 26th, visiting meanwhile Milan, Pavia, Genoa, Pisa, Florence, Ravenna, Venice, Vicenza and Verona. There will be no night-time or Sunday railway travelling, the journey being broken at Lausanne in both directions. By this means the journey through the Alps via the Simplon tunnel will be made in daylight, on the outward journey at any rate.

The total cost will be 20 guineas, including 3rd class rail in England, and 2nd class travelling on the boat and abroad. For a few shillings extra, members of the party who prefer to travel in greater comfort can transfer to the 1st class on the boat and can reserve single-bedded rooms throughout, the general rule being that there will be two beds in each room. The cost of meals taken on the long journeys between London and Milan, both outwards and homewards, and also of a dinner in the train between Ravenna and Venice, will have to be paid for individually.

The amount of time devoted to each town will be necessarily somewhat short, but it will be sufficient (as experience on many previous occasions has shown) for a fine collection of sketches to be made by a party of enthusiasts.

This is the first time that one of Mr. Middleton's parties has visited Italy, though he has now conducted them annually for more than twenty years. There has always been difficulty hitherto in obtaining reasonable estimates, and it is only after a considerable amount of trouble that the present tour has been arranged. The opportunities are therefore exceptional.

Those who join are asked to communicate with Mr. Middleton at 19, Craven Street, Strand, W.C., and to let him have a cheque not later than Saturday, March 11th; early notice being necessary in order to allow time for the final arrangements to be made and for the sketching permits to be obtained.

Prospects in Canada.

We have received an enquiry from a firm of architects in Montreal for a capable assistant for a permanency, and we gather that they find it difficult at present to obtain a competent assistant locally, presumably owing to the fact that architects are busy.

The Carnegie Dunfermline Trust. Unsatisfactory Competition Conditions.

The Council of The Society of Architects desire to point out that in their opinion some of the conditions of this competition for a Women's Institute are of an unsatisfactory nature, and members should therefore refrain from taking part under the present conditions. The name of the assessor is not given and apparently he is to be appointed by the Trustees after the design has been accepted. There is no guarantee that any design will be accepted, nor that the author of the selected design will be employed as architect to carry out the work.

Town Planning in Practice.

A further step forward in the work of the National Advisory Town Planning Committee, was taken by the convening of a National Conference to discuss details of practical Town Planning administration, on Thursday and Friday, February 23rd and 24th, at Liverpool.

The Conference was held in the Town Planning Department (School of Civic Design) of the Liverpool University, Alderman W. Thompson (Chairman, National Housing and Town Planning Council) being in the Chair.

The subjects considered were the actual details of the various steps which should be taken prior to the presentation of a formal application to the Local Government Board for permission to prepare a town planning scheme, the extent to which a Local Authority should, under a Town Planning Scheme, relax or alter conditions relating to widths of roads and methods of road construction, and the standards as to limitation of the number of houses per acre and the best practical methods of applying these standards in the preparation of Town Planning Schemes.

By invitation of the National Housing and Town Planning Council, The Society of Architects were officially represented at the Conference, and have also appointed representatives on the National Advisory Town Planning Committee.

The following are the Society's delegates and representatives:—

On the National Advisory Town Planning Committee—

PERCY B. TUBBS, F.R.I.B.A., Vice-President.

COL. F. S. LESLIE, R.E. (ret.), Past Vice-President and Honorary Secretary.

At the National Conference—

WALTER W. THOMAS, J.P., Past-President.

A. J. MURGATROYD, Vice-President.

E. C. P. Monson, F.R.I.B.A., Member of Council.

The Society of Engineers' Status Prize.

The Council of The Society of Engineers (Incorporated), 17, Victoria Street, S.W., offer a prize of the value of six guineas, for the best paper written by any person on the subject of "How to Improve the Status of Engineers and Engineering, with special reference to Consulting Engineers."

The essay which must be written in the third person, shall contain not fewer than 4,000 nor more than 6,000 words, and must be received by the Society of Engineers on or before May 31st.

Statesmen and Idealists in Architecture.

In discussing some architectural problems suggested by the King's Memorial. the Coronation, and the New Charing Cross Bridge, the British Architect expresses the opinion that there is much opportunity and much responsibility for the architectural profession at the present time, but so far as our observation goes the profession has not been distinguished for large and statesmanlike views. A good deal of time and thought have been devoted to consideration of the status and rewards of architects, and far too little to direct intervention and concern in regard to the development of cities and current building. We think there are signs of some improvement in these respects. We also have some hope that before long our students will set their faces towards ideals of excellence, and not on the winning designs in architectural competitions, which are mostly innocent of any ideals at all! We may do without style, we may do without cornices, we can manage without lambs' tails, but we must have ideals of proportion, some instinct for right emphasis, some perception of fine mass and outline, some feeling for the essentials of great design. There is a great effort being made to drive us back from our own English tradition into the cold austerity of classic art, and we find scarcely-veiled contempt for all those qualities which have given us whatever we had of individuality and charm in British art. These influences may prevail for a time, but only the work of those will live who have ideals that reach far above the passing phase of style or method. We want just now statesmen to claim the right place and status for British architecture in the world's progress, and we want idealists who will encourage all of us to look far beyond the barbarities of the Gothic, the cold formalities of the classic, the inconsequence of the Renaissance, or the brutalities of mere mass and strength. If we ever needed "the inspiration and the poet's dream," it is to-day. We are hustlers, pedants, play-actors, and pretenders. We are not true enough to be sincere, or well enough grounded in high principles to know what we desire.

Visits to Works.

By the courtesy of the architects, Messrs. Lanchester and Rickards, F.R.I.B.A., arrangements have been made for a visit to the Wesleyan Connexional Hall, Westminster, on Saturday, March 11th. The work in progress is of an interesting character and includes some special features in reinforced concrete work. Members will meet at the entrance in the new Matthew Parker Street, by Caxton House, Westminster, at 2.30 p.m.

Architects' Liability for Dry-rot.

In the King's Bench Division, on January 25th, Mr. Justice Channell gave judgment in the action brought by the Leicester Board of Guardians against Mr. John E. Trollope, F.R.I.B.A., of Craven Street, Strand, for alleged negligence in supervision, and in giving a final certificate exempting the contractors from breach of agreement to execute repairs. The plaintiffs stated that in February, 1908, dry-rot developed under the floor of the workhouse infirmary at North Everington, completed in 1906 under defendant's supervision, and that the renewal of the flooring cost about £3,000. The presence of the dry-rot in the flooring affected was reported to be due to dry-rot in some of the 8,000 to 9,000 pegs supporting the joists beneath the concrete. Mr. Pollock, K.C., for the defence, contended that the offer made by the defendant to complete the work was never intended to form the basis of a legal liability which could be sued upon. Mr. John E. Trollope stated that during the time the floors were being laid at the North Everington Infirmary, either he or Mr. Gough visited the work alternately once a month. He never saw any sticks or pegs, and if any quantity had been put in, he would have had to ask what they were for. The Clerk of the Works saw him at the works and in London from time to time. The question of deviation in the construction of the floors was never mentioned in any document or minute. The Clerk of Works was there to see that the specifications were carried out. Witness paid one or two surprise visits to the works. Pegs had to be put in so as to get the level. In delivering judgment, Mr. Justice Channell said that the plantiffs had made no imputations upon the good faith of the defendant. He regretted to give judgment against Mr. Trollope, but the facts were extremely clear. After the builder obtained a certificate of completion from the architect, it was difficult to sue him. In one sense, no doubt, the fault for the damage complained of lay with the Clerk of Works, whose duty it was to call defendant's attention to what was going on; but did that relieve the defendant? On the main question he must hold the defendant responsible. He was sorry it was so, because it was a serious liability, and defendant had behaved extremely well. He must give judgment for the plaintiffs on the claim and counterclaim with costs.

Advice to Young Architects.

Mr. Leonard Stokes, P.R.I.B.A., in his very practical address to Students, points out that the light touch of youth, so full of promise, so full of life, of vigour and vitality, is worth a great deal in all forms of art; in fact, without it what should be a thing of interest becomes an object to deplore, and what should be a thing of beauty is often very far from it. Cultivate youth then, keep it green, and water it well from the springs of learning, for you must study hard if ever you hope to make yourselves felt in your generation. Do not, however, try to be too clever and artistic —with a capital A—for nothing is worse than apparent effort in design. The simple, direct, and restrained, even if it does not catch the eye of the assessor, will do you more good to have achieved than half-a-dozen flashy productions, even if they get you the same number of commissions. Do not be in too great a hurry with your work, or too anxious to get it, but go steady, and never put your name to anything that is not of your very best; also remember that it is often just as important to know what to leave out of a design as it is to know what to put in, and that the one thing of all others to be careful about is proportion. The study of light and shade is recommended by the faculty, but we have in our country so little light, and so much shade, that this fact alone should make us ten times more careful with our proportions.

Mr. Stokes is no great believer in a rule-ridden type of learning; rather would he trust to the eye and its power of judging each individual case, than to the efficiency of a rule which probably has been adduced from quite a different set of circumstances; what looks right in one case would be quite out of place in another, and although a rule may be all very well "to take off from," the sooner we get clear of it the better. Always provided—as the lawyers say—that we have trained our eyes and our judgment to do their duty properly. Architecture at its best is not built up of rules, but rather of rhyme and reason. So whatever you do, think for yourselves. Do not try and be " original"! but be always thoughtful, and very careful, and do not disregard what has been done in the past, for ours is a traditional art, and we must draw largely on the past if we hope to do better in the future. We should, however, use past examples intelligently, and not blindly, even when we design on academic lines. Architecture is a difficult thing to teach, as in our days it is such a comprehensive matter. A smattering of a great many subjects is of no real use to an architect, unless such smattering is in addition to a real, solid grounding in the "three R's" of our calling. Its reading, writing, and arithmetic should not be hard to define or teach thoroughly and methodically, but although architecture is such an important study, and though architects belong to such a great and glorious profession, there is very little to guide us as to the best method of producing the finished article from the raw material at our disposal. Our public schools only teach a very little drawing, and our universities

Advice to Young Architects.

are only just beginning to open their eyes to the fact that our profession exists at all; and we ourselves are not too clear on the matter of the best course to adopt.

To the prize-winners, swelling, no doubt, with pride, and pluming themselves in the sunshine of success, he would say—beware! Many a good man has done the same before, and never been heard of since; and the fact of your having got a prize to-day is only one more reason why you should work hard again to-morrow. Skill of various kinds requires very careful handling, and architectural skill is no exception. All work and no play does, no doubt, make a dull boy, but the dullest man one can possibly meet is the self-satisfied prig, too conceited to learn, and too proud to keep himself in practice in the little that he really does know.

Another pitfall is that travelling students often make poor use of their opportunities when travelling, and either go to the wrong places or spend their time in studying the wrong subjects.

Those who have not been placed have at any rate escaped the awful risks which stare the winners in the face, and if you have any grit in you you will not take your licking lying down. The line which divides a winning design from a losing one is often a very fine one indeed, and the very fact of having competed, and the spirit in which the result is taken, is what does the real good, and not the mere winning of the prize. Emphasising the value of comradeship, Mr. Stokes said he had learned far more from his fellow students, and friends, that he ever did from his teachers and masters. If you happen across a genius cultivate him, therefore, for all you are worth, that is if you do not happen to be one yourself. For the genius is a wonderful creation who has been defined in various ways, but as he is generally abnormally developed in his own particular sphere, a cutting taken from him will not be missed, will often flourish and produce fine results in the common or garden kind of student, just as a sprig cut from a fine apple tree will produce wonders if grafted on to the common crab. The genius in his turn will derive benefit from his more plodding and business-like friend, who may often suggest ways of turning talents to account which might otherwsie have escaped his poetic notice. We do not hear quite so much of craftsmanship now as we used to, and probably for the reason that we have steadied down somewhat, and now recognize that architecture, after all, is itself quite enough of a craft to demand our whole attention. It is not necessary to be a bricklayer in order to grasp the limitations and proper principles of brick design, but it is necessary to know the size and shape of a brick before we can get very far on the architectural high road, and yet he had known young menotherwise very capable assistants! —who could not tell the size of a brick. In other trades the same thing applies, and there is a vast amount to learn about them, so if we like to take up a trade or two as a hobby we shall, no doubt, largely benefit. But as we have to do with all trades, it is obvious that general and intelligent observation, combined with reading and lectures, can be about the extent of our mastery of so many subjects. Drawing is our mode of expression in our type of craft, and we shall find it very useful to be able to draw accurately and intelligibly.

A student's life is not altogether a bed of roses; but it can be a very happy one nevertheless if only he takes a keen intelligent interest in his work. Architecture is a great and honourable profession, and it should be upheld by a fine honourable set of men. Play the game, therefore, strictly and straightforwardly; shun anything which in your own phraseology you would term "not cricket," whether in connection with your work or your desire to get it. An architect has a number of great and ever-increasing responsibilities, and his client has to place implicit trust in him, and this trust should never be abused in the very smallest degree, for although it may be a fine thing to be a great architect and produce a quantity of really fine work, yet who, after all, is more respected and admired by all than the simple, honest, straightforward and upright English gentleman?

Registration of Architects.

The R.I.B.A. and the Society.

References having been made in the professional journals to the fact of there having been no official confirmation of a report that the R.I.B.A. and the Society were jointly considering the Registration question, the Council of The Society of Architects desire to state that the Council of the Society have appointed official representatives to meet official representatives of the Royal Institute to discuss the principles of a Registration Bill.

One meeting has taken place and another is to be held shortly, and while the Council of the Society cannot at this stage make any further statement, they can and do assure the members of the Society both at home and abroad that their interests as members are properly safeguarded under the Registration Bill drafted and promoted by the Society, and that the Council of the Society will see that these interests are not prejudiced by any other Registration proposals which they may be called upon to consider.

The Students' Section.

TRAVELLING STUDENTSHIP, value £25 and a Silver Medal. Subject for 1911, A Social Club. Latest date for receiving drawings, May 1st, 1911.

ARCHITECTURAL SCHOLARSHIP, value £10. Maximum age limit twenty-three years, awarded for measured drawings, which must be delivered before September 30th

QUALIFYING EXAMINATION FOR MEMBERSHIP, April 11th to 13th, 1911, London, Manchester, Cardiff, Oxford, and other Centres. Students of the Society may take the Examination by sections at a fee of 15/- for each section, or the whole Examination at one sitting at a fee of 11 11s. 6d.

Full details have been published in the last two issues of the Journal, further copies of which may be obtained of the Secretary, price sixpence each.

Travelling Studentship Competition.

Further Replies to Enquiries.

- Ouestion 13. The limit of height of outer wall is shown as 57 ft., does this imply that no gables or other features are to be taken above this height?
- Answer. No, a parapet, gable, or other architectural feature may be added if necessary, subject to Local By-laws.
- Question 14. What is the height and character of the adjoining premises at the point marked B on site plan?
- Answer. This is not known and is immaterial for the purposes of the Competition.
- Question 15. Is it permissible to use the 30 ft. of open space at the West End of site as a goods entrance yard?
- Answer. See answer to questions 1 and 2 in last Issue. As an uncovered space it could be put to any suitable use.
- Question 16. With regard to heating, will an indication of the position of the radiators, coils, etc., be sufficient for the purpose?
- Answer. See conditions as to "Drawings required." Competitors must use their discretion as to the scope of the term "Working Drawing."
- Question 17. Can the finished drawings be shaded to emphasize projecting features, etc.?
- Answer. See answer 16 as to Working Drawings.
- Question 18. Where can the application forms be obtained?
- Answer. See answer to question 6 in last Issue. These will be ready after April 3rd.

Royal Academy Exhibition, 1911.

The following are the days for receiving works:—Water-colours, pastels, miniatures, black-and-white drawings, engravings, etchings, and architectural drawings, Friday, March 24th; oil paintings, Saturday, March 25th and Monday, March 27th; sculpture, Tuesday, March 28th.

N.B.—Not more than *three* works may be sent by any one artist. No work will under any circumstances be received before or after these specified dates. All works must be delivered at the Burlington Gardens Entrance. None will be received at the Piccadilly Entrance. Hours for the reception of works, 7 a.m. to 10 p.m. Labels and forms can be obtained (during the month of March only) from the Academy. Applications for them made by letter must be accompanied by a stamped and addressed envelope for their enclosure, to the Secretary, Mr. Fred. A. Eaton.

The Ethics of Brass Rubbing.

The Guardian publishes a letter from "F. S. A." with which architects and archæologists will agree where he says, "Rubbing brasses does them no good, and rubbing them with untrained or unskilful hands may easily do them a great deal of harm, so much so that the guardians of many of the best brasses in England either refuse permission to rub them altogether, or restrict their permission. Furthermore, no one has any business to rub a brass at all without obtaining the permission of the guardian of the building in which the brass is fixed. Worst of all, experience shows that a considerable number of brass-rubbers use means that are most injurious for the purpose of attaching the paper to the stone or wall to which the brass is fixed. A book on English Church brasses, published this year, contains a most mischievous passage on the dodges which may be used for keeping the paper on a wall; drawingpins, which are only condemned because they seldom find a hold, and a variety of adhesive materials, all of which would leave a stain, and many of which would damage the stone on which the brass lies. No one ought to be allowed to rub a brass who has not learned how to keep the paper steady on the surface without artificial aid; there are plenty of smooth horizontal and vertical surfaces available for practice."

Mainly about Members.

We regret to have to announce the death of Mr. George Heaton, of Wigan, one of the original members of the Society, with which he was actively connected for nearly twenty-five years. He was transferred to the class of Retired Members on becoming eligible in 1910, at the close of a long professional career.

We also regret to announce the death of Judge Emden, of the Lambeth County Court. His honour, who was in his 62nd year, presided at the Lambeth County Court until quite recently, and retired to his residence, at Crowborough, Sussex, for the week-end. On the Monday he became unwell, and on Saturday, February 18th, passed away somewhat suddenly. Judge Emden was the son of the late Mr. W. S. Emden, of Haverstock Hill, and a younger brother of Mr. Walter Emden, a Past-President of The Society of Architects, alderman, and formerly Mayor of the City of Westminster. Judge Emden in the early days of the Registration movement took an active interest in the drafting of the Bill and was a member of the original Architects' Registration Bill Committee, and at the time of his death was a member of The Society of Architects Registration Committee. He was the author of a work on "The Law of Building," A Complete Collection of Practice Statutes, and other standard works. Mrs. Emden and two sons, now at Oxford, survive him.

At Bargoed, Mon., a Picture Palace Theatre seated for 700 persons is being built from plans by Mr. George Kenshole, of that town.

MR. A. D. GREATOREX, M.INST.C.E., Borough Engineer of West Bromwich, has been nominated as President of the Institution of Municipal and County Engineers.

Mr. E. Coath Adams, of Plymouth, has been elected Vice-President of the Devon and Exeter Architectural Society.

Messrs. Eedle & Meyers, of London, are among the twelve selected architects invited out of forty-four applicants to submit plans in competition for the proposed Central Library for Deptford.

Mr. T. Overbury, of Cheltenham, has been elected a Vice-President of the Gloucestershire Architectural Association, and Mr. J. Fletcher Trew and Mr. H. Healing, Members of the Council.

Meetings and other Fixtures of the Society. Session 1910-11.

Subject to such alterations and additions as may be announced from time to time in the "Journal" or by circular.

1911.

- Mar. 8th. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.
 - ,, 9th. Committees and Council Meetings, followed by fifth Ordinary Meeting, at 8 p.m. Paper on "The Relation of Sculpture and Carved Ornament to Architecture," by Mr. W. S. Frith.
 - ,, 11th. Visit to Wesleyan Connexional Hall, Westminster, 2.30 p.m.
 - , 23rd. Committee Meetings.
 - .. 28th. Entries close for Home Examinations for Membership.
- April 6th. Committees and Council Meetings, followed by sixth Ordinary Meeting at 8 p.m. Paper on "English Furniture," by Mr. Percy Macquoid, R.I.
 - ,, 11th, 12th, 13th. Examinations for Membership.
 - .. 27th. Committee Meetings.
 - .. 28th. Annual Dinner.
- " 29th. Visit to Building Trades Exhibition, Olympia.
- May 1st. Last day for submitting Travelling Studentship Drawings.
 - .. 3rd. The Society of Architects' Lodge Meeting, Liverpool Street Hotel, E.C.
 - .. 4th. Smoking Concert, 28, Bedford Square.
 - " 11th. Committees and Council Meetings, followed by seventh Ordinary Meeting at 8 p.m. Paper on "Hospitals," by Mr. A. Saxon Snell, F.R.I.B.A.

Annual Dinner.

The Society of Architects' Annual Dinner will be held on Friday, April 28th, during the week of the International Building Trades Exhibition at Olympia, when arrangements will be made for an official visit in response to an invitation from the Directors. This visit will probably be made on Saturday, April 29th.

Papers for Session 1910-11.

1911.

March 9th. The Relation of Sculpture and Carved Ornament to Architecture.

By Mr. W. S. Frith.

April 6th. English Furniture. By Mr. Percy Macquoid, R.I.

May 11th. Hospitals. By Mr. A. Saxon Snell, F.R.I.B.A.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Year Book.

The issue of the new list of members always brings notification of changes of address, etc., and of any clerical errors. Mr. F. C. Barker, of York Chambers, Scarborough, kindly points out that the additional address with which he is credited is not his, and that his only address is at Scarborough.

Ordinary Meeting.

The Fifth Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday, March 9th, 1911, at 8 p.m.

Agenda:

- 1. The President to take the chair.
- 2. Minutes of the last Ordinary Meeting.
- 3. Nominations for Membership.
- 4. Announcements.
- 5. Ballot for candidates for Membership and Studentship.
- Paper on "The Relation of Sculpture and Carved Ornament to Architecture." By Mr. W. S. Frith. Ladies are invited.

Light refreshments will be served after the meeting.

THE

Journal

OF

The Society of Architects

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Including Transactions and Architectural Notes.

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APRIL, 1911.

New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Town Planning Conference, Liverpool.

The Society of Architects was officially represented at the Congress on February 23rd, by Mr. Walter W. Thomas, Past-President, and Mr. A. J. Murgatroyd, Vice-President, from whose report it would appear that the Conference was well supported by representatives from all over the country, largely Surveyors and Town Clerks. The questions put by these gentlemen representing their several districts, showed that the difference in values of land between suburbs of London and their districts, varied so enormously, that what would apply in the way of Town Planning to one district would be absolutely prohibitive in another.

The question of altering the bye-laws to permit of the construction of cheaper streets and as to the parties who would benefit by this, whether the tenant or land-owner, is a very complex one, as is also the difference between leasehold and freehold properties, and the position of owners of small plots of land within a proposed Town Planning area, as in many cases the construction of streets would wipe out the small owners of land, and the question of compensation would arise.

One point the Conference did not touch upon was that every Town Planning area should have a certain portion of it set aside for the erection of cottages for the working classes, varying in rentals from 4/6 to 8/- per week, and that a further area should be compulsorily provided for the erection of shops and business premises, as no "area" could possibly be complete without the provision of such business premises to provide for the wants of the residents.

The Town Planning movement is only in its infancy, and will require a great deal of consideration before any Local Government Board bye-laws can be framed to apply to the various districts. Had these matters been considered half a century ago, many of the troubles that now arise would not have existed.

Proceedings.

HE Fifth Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, March 9th, 1911, at 8.0 p.m.

MR. PERCY B. TUBBS, F.R.I.B.A. (Vice-President), having taken the Chair, the minutes of the previous Meeting, as printed in the Journal were taken as read, and were confirmed and signed.

Twenty-one nominations for Membership and three for Studentship were announced, and also the gift from a new member of a number of books for the Library.

The Ballot was then taken and the following Candidates were declared to be duly elected :-

As Hon. Members:

H.R.H. PRINCE LUIS FERNANDO OF SPAIN. RIDDELL, SIR GEORGE.

Ouintana, Madrid. 20. Queen Anne's Gate, S.W.

As Members:

AISH, CLIFFORD AUGUSTUS. CASTLE, JOHN GEORGE,

DAVSON, PERCIVAL MAY, DICKINSON, ARTHUR HOWARD, ENGLAND, ARNOLD, GREEN, BERNARD WALTER, HASLAM, STAFFORD. KITCHING, ROBERT RIDLEY, PEARSON, ERNEST WALTER. ROUND, ABEL. SEXTON, GEORGE ALEXANDER, TILSON, HERBERT THOMAS, STEWART, ALAN JAMES, STOUT, JOHN STEPHENSON,

WILLIAMS, WILLIAM HENRY,

HAMLYN, EDWIN EDGAR HAROLD. TAYLOR, THOMAS EDWARD,

415, Oxford Street, W. London City and Midland Bank Chambers, Cleckheaton. Birkbeck Bank Chambers, Chancery Lane. 7, Priory Street, Dudley. All Saints' Road, St. Annes-on-the-Sea. Plasketlands, New Wanstead, N.E. The Albany, 21, Mawdsley Street, Bolton. County Architects' Office, Chester. 21. Albert Road, Middlesbrough. Town Gate, Idle, Bradford, Yorks. 1. Newhall St., Birmingham. Bank Chambers, 42, High Road, Kilburn, N.W. Railway Road, King's Lynn. 3, Westover Bldgs., Gervis Place, Bournemouth. 36, Lowther St., Whitehaven. The Grove, Lanchester, and Annfield Plain, Co. Durham.

Town Hall, Mountain Ash, Glam.

As Students:-

ADAMS, REGINALD ERNEST, 18, Heslop Road, Balham, S.W. Bingley, Yorkshire. ATKINSON, FRANK, 120, Deane Church Lane, Bolton, Lancs. KEIGHLEY, HARRY ATKINSON, MADDOCK, GERALD, 28, Albion St., Hanley.

Marles, Charles Wright, Mowbray, Clyde,

· OVERY, CLEMENT FROST,
PHILLIPS, LLEWELLYN ORD,
SMITH, LEONARD FREDERICK,
THOMAS, JOHN RODERICK,

WILSON, WILLIAM JOHN,

62, Marylands Road, W.

c/o W. D. Jenkins, A.R.I.B.A., George Street, Llandilo. S. Wales.

Pride Hill. Shrewsbury.

5, Wakehurst Road, Wandsworth Common, S.W. "Horrabridge." Dorking, Surrey.

c/o W. D. Jenkins, A.R.I.B.A., George Street, Llandilo. S. Wales.

16, Edward Street, Portadown, Co. Armagh, Ireland.

Mr. W. A. Frith then gave a lecture on "The Relation of Sculpture and Carved Ornament to Architecture," illustrating his remarks by means of a large number of lantern slides.

At the conclusion of the lecturer's remarks, Mr. Percy B. Tubbs, f.r.i.b.a. (Vice-President), proposed that a very hearty vote of thanks be accorded to Mr. Frith for his very instructive and interesting lecture.

Mr. R. Geo. Bare (Past Hon. Librarian) seconded the proposition, and said that it was a work of love for Mr. Frith to lecture to them on sculpture, and he had shown them some very excellent slides. He felt a double pleasure in seconding the motion, because he had been instrumental in introducing Mr. Frith as their lecturer.

Mr. S. W. Kershaw (Hon. Member) in supporting the vote of thanks, said that the lecturer had referred to Chartres and the Byzantine influence displayed in the sculpture. He, the speaker, did not think that there was any Byzantine influence generally speaking in the sculpture itself, although there might be a trace of it in the drapery of the figures.

Mr. Stirling Lee (Visitor) said no one knew the subject of sculpture in relation to architecture so well as Mr. Frith, who had worked in every style, and none could be found to give them a better demonstration. There were one or two points. however, which might have been emphasized, and something might have been said as to their present position, what they had lost and what they were working for. Mr. Frith had said that all art should be one; an idea which the Greeks held, although, he thought, it did not mean in one person, but that the whole should be one. The Greeks had but one idea which governed all their lives; that of harmony. It was perhaps curious to find that the earlier Greek work was painted. Their stonework being rough was first covered with plaster and then painted, so that their architectural sculpture in association with it was painted in order to form a decorative scheme of colour. The old men in their work never cut up their form, using it as "packing"; never cutting the hair which was simply painted, and using the whole thing as a geometrical pattern, introducing form to cut it up with colour. The eyes and the drapery were sometimes painted. It was a golden rule with them never to cut up their form when it would spoil their pattern, the latter being part of the architectural design. Ruskin had said, that the life of a nation was written in three books-the

book of its words, the book of its history, and the book of its art. All were necessary. but the only reliable one was the history of its art, because art could only be the outcome of the environment in which a nation lived. It applied to the Egyptians, the Greeks, and the Romans, with equal force. In Greek work they would see at once the result of their lively imaginations; all their landscapes were full of suggestions of imagery and poetry and the only thing which they could not understand was how the art was ever lost. With architecture on such an enormous scale. no sculptor could do insignificant work. A man working in the environment of colossal buildings was bound to do great work. In the work of the Romans, one saw the effect of their judicial minds in the portraiture which they produced, losing the beautiful imagery and mysticism of the Greeks, and coming down to material facts. In Gothic work, they found an atmosphere of the Christian Church, and the actual spirit of illustration which came in to teach the people, and always the art of a nation was the outcome of its environment, historical periods being illustrated by its art. At the present day, they had lost all that. Their sculpture was neither imagery, language, nor symbolical. The only use for sculpture at the present day was decorate architecture, and it was only used from purely asthetic reasons. It had no teaching power, no religious, civic, or symbolic power, and all the languages in which sculpture had been used were absolutely past. The very simple reason was, he thought, that they now had a phonetic language. Printing had come in, every one could read, and there was therefore no necessity to teach the public to read by their buildings. Architecture and sculpture were two great sciences; the science of Phideas and the science of Michael Angelo. One was governed by the geometrical science, and the other by the anatomical. Those were the two great sciences which governed architecture and sculpture, and the foundation of both of them. One was carving down, and the other was building up. They had to recognize those two sciences, and the parts which they played in their buildings, because of the great national thoughts to which they gave rise. The two arts properly combined would produce the grandest buildings for handing down to history through the ages.

MR. H. GUICHARDE TODD, F.S.A. (Scot.), Member, said he had much pleasure in supporting the vote of thanks, and hoped that the lecturer would not take it as a merely automatic expression, but as the genuine feeling of the meeting. In the architectural profession a good deal was heard about proportion, and there was a tendency to consider as beautiful a building which was in proportion, which was hardly true, because proportion in itself was not beauty, but an abstract matter which only became beauty when combined with material and texture. Sculpture or carved ornament as applied to buildings was, he thought, a medium for the expression of texture and the possibilities of the material. He thought the last speaker had said something very true in stating that the motive of sculpture had been lost. Their lecturer held that it was very difficult to define art, but he might

have told them a little about the origin of art. He believed, it had been generally accepted that the first works of sculpture were evolved from the rude images and blocks of stone which were supposed to have fallen from heaven. These the primitive people worshipped, giving them first ears to hear and then eyes to see. It was left to the Greeks, he thought, to give them the beginning of imitative art, the art of the Egyptians being more symbolic. In regard to modern sculpture, Sir Joshua Reynolds laughed at the folly of trying to create draperies in stone. It was, no doubt, a great mistake to perpetuate some of their modern fashions in sculpture, and when they put up a monument to an eminent gentleman in a badly cut frock coat, it rather appeared as though they were inflicting some punishment upon him.

MR. ELLIS MARSLAND (Past Hon. Secretary) said he would have liked Mr. Frith to have given them a few modern examples. As architects, they would have appreciated his opinion on some of the present-day work, and what he considered to be a building where the sculpture upon it was entirely in harmony with the architecture. They had heard lately a great deal about a certain building in the Strand, where the sculptured figures were hiding themselves in holes in the wall in an endeavour to cover their nakedness, and a little further down, they had a building in which there were certain young ladies with beaming faces, sliding down a pediment without the slightest regard as to the ultimate result. He thought, it was a great mistake to place figures upon the top of a pediment in that fashion. It seemed a very unhappy position to put sculpture in relation to architecture, and a much better place would have been inside the pediment. Michael Angelo's tomb was an instance of that unsatisfactory relationship, and it seemed to him that the two gentlemen depicted there would be much more comfortable in some other position. It would have been very interesting to know Mr. Frith's views in regard to the proper relation in a building between architecture and sculpture; where it should and should not be placed.

MR. M. F. Surveyor (Visitor) said he would have liked to have heard something about Indian sculpture. The work of the Indian sculptors had been executed from a different standpoint. In Greece, perfection of human form was the final goal of the sculptor, but the old people of India wanted to represent the inner self as it were of Buddha, and so they deliberately omitted the anatomical details. That was the idea put forward by Indian art critics, and Mr. Havell, the principal of the Art School at Calcutta, had recently published a book on Indian painting and sculpture, in which he put forward the suggestion that it was impossible for the ancient sculptors of India to have overlooked the correct representation of anatomical details, having regard to the beauty with which other ornamental details had been rendered. They merely wanted to represent the pure and simple outline of the human being, and not

the perfection of form as with the Grecians. The best examples of such work were to be found in Thibet, in the north of India, and Java, in the extreme south, and dated back to 400 or 500 B.C. It was curious, he thought, that such beautiful examples should be found at the extremities of India, but it was probably accounted for by the travelling of the Grecian influence at the boundary.

The Chairman then formally put the proposition to the meeting, and it was carried by acclamation.

In reply, Mr. Frith said he was gratified by the remarks that had been made. especially in view of the great diversity of views that existed among artists. The main reason why he had not touched on modern work was that while they were judged by the same rules as the works passed in review, criticism was easily mistaken for personalities, and so provided an easy way of getting into trouble. Mr. Marsland had invited him into the Strand, indeed, for that very purpose. He entirely agreed with Mr. Marsland, however, as to the difficulty experienced in placing figures on pediments; it was difficult to do this without attracting attention to the insecurity or discomfort of their position, and this should not be the point to attract remark. With regard to modern clothing, which certainly presented great difficulties, the question was a very old subject of argument, and was really part of the old question of "What was Art." It was not necessary for art to be purely imitative, and that was the reason he referred to Shelly's vision as the spirit of art, as something which took place within the person, and a work of art as the attempt of the worker to realize that vision. It was the man's effort to realize that vision, that constituted art, and not the thing itself, and that he thought in a very great degree answered the reference to Indian sculpture: there the Indian artists were in their way endeavouring to realize their vision of Buddha. This abstract idea also applied to the question of clothing, the idea underlying the representation of nudity in sculpture was largely to represent man divested of the trappings of his immediate environment, to represent man in the abstract, and not in the clothing of 1504 or 1911, as the case may be. Besides, this, of course, the human form had the attraction of being the most beautiful the universe contained or the mind of man could conceive.

The Relation of Sculpture and Carved Ornament to Architecture.

By Mr. W. S. FRITH.

HE discussion of the relation of sculpture and carved ornament to architecture is necessarily directed mainly to that interesting series of instances, where the art of form finds its fullest expression through the harmonious co-operation of both its branches: for though sculpture and architecture may each have their own definite sphere, and are in that sense independent of the other, it is when acting together in harmony that each is recognized as attaining to its highest achievements.

These periods illustrate that architecture and sculpture being phases of one art, their excellence is largely interchangeable and that when working in entire sympathy and understanding, the art of form is effectively presented, because it is then presented in its entirety.

The Egyptian, the Assyrian, the Greek, the Roman, the Gothic, the Rennaisance periods are all distinguished by the presence of an adequate sculpture, in sympathy with the æsthetic theme of the architecture much in the same way as a song and its accompaniment.

It is suggested that all art is one, and therefore the architect, sculptor, and painter should be united in one person.

There are so few instances, however, of this being done with success, that these instances constitute exceptions rather than rules, and judging by the amount a sculptor has positively to learn, and the difference of standpoint his phase of art demands, there is in my opinion little probability of the artist in either branch really possessing more than a smattering of knowledge in the allied arts.

The early use of sculpture would appear not to differ essentially from the present, viz., assisting to realize an object, or event, a person or an abstract idea; and it still appeals as having qualities which give it predominance as a nucleus around which the associations and memories of a person or event may congregate.

Ruskin states that to make things in real volume is a primary human instinct, and cites the case of a child making a cat and kittens in dough in support of this theory.

I propose by passing in review various examples with the aid of the lantern slides to make clear the main points of the subject.

The subjects of the Egyptian sculpture were historical records of the Kings and their achievements, the representations of their various Deities; and there are some very interesting and realistic portraits of Priests and other people of importance, most of these minor works are in wood but their treatment is similar in character to the granite work, and perhaps for this reason suggests their being thought out in granite.

The Assyrian works are much the same in subject, the records and doings of the Kings, their Deities, and their sports. Those depicting lion hunting are of exceptional vigour in treatment, and expression, as might be expected of a sport loving people.

Of the Greek, the sculpture was mainly devoted to the service of religion, and as the worship of beauty formed a not inconsiderable part we find this reflected in the humanizing of their Deities, and the effort to represent these of the highest physical development, beauty, and dignity: an effort which eventually developed that magnificent school of sculpture which is still the wonder and the admiration of the world.

Although Rome continued much the same theology: the impulse of the people being different, the real seems to have had more charm than the ideal; and we find a development of portraiture, and a careful rendering of detail: the things which are, matter rather than the things which might be.

We get an actual Hadrian in his statue, and it is a fine statue. We find also a development of the minor forms of sculpture, foliated ornament especially gained in importance.

Greek carved ornament was much more restrained and seems designed rather for effects of light, and of conveying through its texture, the effect of lace-like enrichment on a solid structure: while the Roman is distinguished by vigour and boldness of design, the capitals of the Pantheon which I take as typical of Roman ornament has remained the dominant type in use for Palatial buildings to the present day.

Generally, Roman sculpture conveys the impression of being used rather for its decorative value as an adjunct to luxury rather than, as in the Greek, for the love of art and delight found in seeking for its higher development.

The break up of the Roman Empire coinciding with the change of faith: and that faith one, in which the ancient sculpture was considered idolatrous; together with vast social disturbances, brought about the disappearance of the architecture and sculpture identified with ancient Rome. After an interval we have the rise of the Byzantine order in which while sculpture served to record the persons and the incidents of the Faith, this was effected in a way rather symbolical than personal, and in architecture its principal use was to assist to produce pattern, texture and rhythm, of the general composition. The statues from Chartres Cathedral are a good instance of this, as also is the Portal of Rheims which though of later date carries on the same traditions, and as an example of design must be considered a masterpiece.

This system of using sculpture affords considerable opportunity for the introduction of a variety of scales in the figures, a device not exclusive Gothic but of which considerable use is made in all its varieties. The harmonious contrast of broad surface with broken surface, of lines with fret; and curved, with straight line, while preserving the general structural idea, is one which provided the artists with material for some centuries.

The many examples the various cathedrals afford, are well worthy of long and

continued study, and it is the conviction of all who have been interested in the Gothic phase of the art, that it is not only what has been done, that is of interest; but they feel that there is here a mine of knowledge and suggestion capable of immense future development.

The Percy Tomb is a fine example of English work under this general influence; the way in which the whole weaves together, the arrangement whereby the structural idea carries through, and is borne out by the foliated and moulded enrichment and the way in which the composition is varied and completed by the figures, together with the grand treatment of the foliated enrichment is worthy of all praise.

The revival of classic learning in Italy, and the revival of classic art which followed it, cut short the independent development of Gothic, but not without there being effort to blend the two; as in the art of Northern France, and in that called the style of Francis I., the Jubé de Limoges must be taken as a sufficient example.

With reference to the art of Italy, I think it may be said that Italian artists never took kindly to the Gothic idea of the human figure represented merely as a symbol (as it were a letter in the alphabet); but in even their early work felt and represented the strivings of the individualistic spirit within; although, the work of Nicola Pisano and his school approximated to the texture scheme of the Gothic sculptors, there is yet a feeling for form and movement which differs from these and in the work of Ghiberti, Donatello, Verrocchio, Lucca della Robbia, Rossillino, and many more, and above all, Michael Angelo the details become lost in the grand effort to realize to the fullest the conception of the mighty spirit moving in the divinely formed body; the work arriving at a stage when it is its emotional aspect, rather than its architectural that enforces attention.

As our subject is, however, Sculpture in relation to Architecture, and having viewed a number of illustrations, it may be well to consider the question of general principles; for in reviewing these various works, we seem to need a guide to consecutive thought, other than that supplied by the purely historical aspect.

Yet, in approaching this, the question at once arises as to who shall define art, for the spirit of art is as intangible as a dream—may be it is a dream—of which may be said in the words of Shelly:—

"On an unimagined shore,
Under the grey beak of some promonotory,
She met me in such exceeding glory
That I saw her not."

(Epipsychidion.)

Though the spirit of art is indefinable and may be considered as a vision apprehended not by any means by the eye alone, the efforts to realize this vision, which result in works of art, are found to conform to certain general rules: with reference to which in reading a musical book lately, I found a definition of the qualities a work in that form of art should possess, which seem to me to the point;

it commenced by saying Form, Expression, Feeling, and Variety were essential. Form, the shape presented to the mind; Expression, the prominence given to some sounds and the subordination of others; Feeling, the character of the effect produced; and Variety, to prevent the work becoming mechanical and so lifeless. It further states a melody should display amidst all its features, and phases, an all-pervading unity and relationship among its several parts.

The text then proceeds in criticism of a certain arrangement, as wanting in design in its form, regularity in its expression, stability, or clearness in its feeling, and method in its variety.

These directions seem so admirably adapted to the art of the sculptor and carver, that they might well have been written expressly for him, except that being written about musical composition they make no mention of the artists' hand.

I do not suggest that the musical world in anyway overlooks this, the human executant element, but that in the graphic and plastic arts it necessarily occupies a very important place indeed.

In these examples, Certosa at Pavia, I think it can be claimed that the all-pervading unity and relationship is preserved, and that the less important elements are treated with due subordination, that the varied textures and minor ornamentation are treated in an interesting and able way indicating great ability in design and very skilful execution. Much the same as to general design and importance given to some and the subordination of other portions can be said of the Altar from Vicenza.

I think, however, that in the two doorways from Como, we find a more marked distinction in design; the artist seems to be possessed of a more varied pallette, the rhythm is felt throbbing more harmoniously throughout, and there seems more room left for the imagination to play in. And here, it may be remarked that a work may be so obviously finished, that no point arising to call for comment, we simply pass it by and are much more interested in the less complete.

I think this brings us to the Question of Variety.

Lord Bacon in one of his essays remarks: "There is no beauty but hath some quality of strangeness in it." I think it may also be said that we do not recognize beauty in that which is altogether strange, and it is the *just proportion* of strangeness harmonised with that which is *familiar*, which constitutes the charm.

How is this charm of the familiar and the new to be obtained? By a search through the realms of Nature by developing a helpful imagination, and by acquiring the power to imitate, together with the power to invent, and to express or rather to reveal your discoveries with a skilful hand. Imitation alone is not sufficient, it must be balanced and controlled; in the Gothic period the direct imitation of leaves as in Early Decorated, soon ceased to satisfy, and developed into the more rhythmical Perpendicular.

In the Rennaisance period, the most satisfactory arrangement of ornament was found to be (where direct imitation was used at all) to obtain the necessary

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architectural quality by a considerable dominance of conventional form, and this occurs even in the extremely free treatment of Grinling Gibbons.

The principles applying to the figure are not identical with those of ornament, but in the Greek work I think the contention that the earlier and less realistic work is the best fitted for architectural purposes can well be maintained.

And in the Gothic period the unity of the whole could not have been preserved except the sculptors' convention permitted the lights and shadows to be of the right size and shape and to occur in the right place, three things of which imitation can take no heed.

On this question of harmonistic treatment which really embraces the question of distance effect also, M. Camille Mauclair writes in his work on Rodin: "This theory to which Rodin approved of my giving the name of 'deliberate amplification of surfaces' is simply the critical principle of Greek sculpture, which has been entirely misunderstood by the Academic School. That school which is supposed to honour the Greeks, is really false to their spirit, and their teaching. Moreover, this principle which belongs to all primitive statuary that was made for the open air is to be found among the Egyptian and the Assyrian. It calls in question the Academic Tradition, whereby exactitude is confounded with truth." This deliberate arrangement of surfaces is well borne out in the examples that have been shown this evening, and the Wellington Memorial probably the finest monument in existence is a further example of great care devoted to the arrangement, design, and treatment of light and shade bearing surfaces, practically coinciding with the Rodin view.

In the Michael Angelo example, it will also be found that the dominant feature is the light bearing surface finely defined by the broad grouping, and design of the shadows, and indeed, this may be accepted as one of the most important elements in the means of expression of the art.

This may be considered as rather appertaining to the craftsmanship; of course, craftsmanship is after all only the servant, something more is required in a work of art, something on which the human mind can work; for in all real art it is essential that underlying the mere representation the working of the directing mind and the touch of the executing hand should be evident. In certain work the skill of the hand is alone sufficient to justify the work; in the Roman stucco for instance, how great a charm is imparted by the hand traces left upon them.

In the work of Rodin, how much does it owe to the same cause; and in the work of Michael Angelo, how do those parts so called unfinished yield traces of his consumately skilful hand moving as directed by his mighty brain—it brings the thing home to us and seems to place us in immediate touch, with the artist working at those grand conceptions, which for four hundred years have filled so large a space in the history and development of art; and to use a hackneyed phrase which expresses nevertheless a profound truth, supplies the "touch of Nature that makes the whole world kin."

The Cause and Prevention of Dry Rot.

Mr. James S. Holliday, Senior Vice-President of the Institute of Builders, in a lecture on "Timber," delivered before that body last month, says that of those diseases which attack converted timber, the most important is dry rot. The spore of fungi germinates on damp wood, provided some alkali is present—such, for instance, as ammonia fumes in stables—then, under the influence of warm still air—i.e., absence of ventilation—its spawn threads spread, not only in all directions through the wood, forming greyish white cords and flat caked mosses of felt on its surface, but even over damp surfaces of brickwork or soil, and thus to previously unaffected timber. The fungus destroys the surface of the timber, lessening its weight, causing it to warp and crack, until at length it crumbles up when dry into a fine powder, or, absorbing any moisture, becomes a soft cheese-like mass.

Imperfectly seasoned timber is most susceptible to dry rot. The fungus can be spread by its spawn, and we are told that this can be carried by the clothes, or even by means of the workmen's saws, to other wood that is sound, if the diseased timber be left near it.

The Prevention of Dry Rot.

On the other hand, dry timber, kept dry, is proof against dry rot, and exposure to really dry air is fatal to this fungus. (If only the ends of properly seasoned beams, which are inserted in brick walls, were to be previously creosoted or treated with some other antiseptic, it would afford a most effective protection against dry rot.) Probably we hear more about dry rot in newly erected buildings now than in former years. It is a defect which has caused a great deal of trouble, and has given rise to much litigation. The author suggests, as a practical builder, that to a certain extent the greater prevalence of the disease may be due to the altered conditions of building. Formerly a reasonable time was allowed for the erection of buildings, whereas, in the present day expedition seems to be the essence of most contracts. This means that before the building has had any time to rid itself of the immense amount of water used in its erection, timber is used for the partitions, floors, roof, etc., the ends of which are fixed in and against the walls. A warm, damp atmosphere surrounding the wood—as for instance, under a floor immediately over the ground—and unventilated cellars are favourable to the spread of the disease. The author suggests that no timber should be fixed in a position so that the moisture in and around it cannot be easily evaporated. No wood slips should be built into the top of the concrete without being creosoted, and no boards should be laid directly on the concrete and afterwards covered with linoleum, etc. All the space under wooden floors should be cleared of vegetable or fungoid growth, and covered with concrete, and this should be left as long as possible. No wooden pegs communicating with the earth beneath should

be left in and through the concrete. Inlets should be formed in walls for the introduction of fresh air underneath all ground floors, and also for cross-currents. The space under floors should be cleared of all shavings and pieces of wood.

Antiseptic Treatment of Timber.

Tar and pitch were used for painting or smearing wood from periods of the most remote antiquity. Greek and Roman authors narrate that the astringent portions of the oil from olives, and also of that from cedar, larch, and juniper, were used for the preservation of articles from decay, or from the attacks of insects.

Mr. Boulton, in his work on antiseptic treatment of timber, says that not until the eighteenth century can anything beyond the merest trace be detected of serious research into the causes of decomposition. It is stated that during the struggles of Great Britain with the host of her adversaries the prevalence of dry rot in the timbers of the men-of-war vessels assumed the proportions of a national calamity, and that various experiments were tried of injecting resinous vapours, and the salts of copper, iron, zinc, etc.

But it is since the birth and growth of the railway system that antiseptic treatment of timber may be said to have received its most important development. The original stone blocks and other solid supports at first used on the permanent ways were found to be too rigid, and had to be replaced with a more elastic material. Wood sleepers decayed rapidly, and hence a process of antiseptic treatment for prolonging their life had to be considered.

By the year 1838 several systems of antiseptic treatment were before the public, and competing for the favour of engineers, viz., corrosive sublimate introduced by Mr. Kyan; sulphate of copper, introduced by Mr. Lloyd, and heavy oil of tar (afterwards termed "creosote") introduced by Mr. Bethell.

As early as 1756 attempts were made in England and America to inject into or impregnate timber with vegetable tars or with extracts therefrom, but the practical introduction of the process is due to Mr. John Bethell. His celebrated patent, dated July, 1838, does not mention the words "creosote" or "creosoting." It contains a list of no fewer than eighteen various substances, mixtures, or solutions, and among them a mixture of coal tar and dead oil distilled from coal tar, which is the origin of the so-called "creosoting" process.

Pure creosote is the product of the destructive distillation of wood. Commercial oil of creosote is a dark brown liquid obtained from coal tar, of which it constitutes from 20 per cent. to 30 per cent. It is produced by distillation, and consists of the light and heavy oils of tar, but its composition is very variable.

Creosoting.—The benefits of creosoting are of a threefold nature—that is to say, three different actions are set up—(1) Physical action. A very greatly increased

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solidity is obtained by choking the pores, the wood becoming more or less solid blocks.

(2) Physiological action. The smell of creosote imparted to the wood prevents germinal life, which is well known to be destructive to timber, being developed within it. (3) Chemical action. The tar acids in the creosote are antiseptic, and also cause some changes in the wood, which are stated to play an important part in the preservation of timber.

Seasoning, Natural and Artificial.

It is generally thought that natural or air seasoning gives the best results, for which purpose the wood is piled in a seasoning yard, protected so far as possible from sun and rain, but with air circulating freely on all sides of each log. Bad ventilating is sure to cause dry rot; stacking timber vertically or at an angle is inclined to produce unequal drying; the planks should be stacked flat or on edge.

Artificial seasoning systems have been adopted by several contractors in London, the object being to make fresh imported timber usable, instead of having to stack it for the long periods required by natural seasoning.

A method of patent artificial seasoning adopted by the author is as follows:— A stoving building is erected about 26 ft. by 8 ft. (inside measurements), built in brick and lined with cement, with a flat fireproof roof of concrete, and a pair of teak doors closely fitted at one end. Three openings, 12 ins. in diameter, form ventilators in the roof, in which there are also two small holes for lowering a registering thermometer through. Trolley lines are laid on the floor, so that the timber can be loaded on to the trolleys outside and run into the stove. Under the floor a chamber is formed with an arrangement for superheated steam, which is conducted from an adjacent boiler through a system of pipes to discharge-pipes which distribute the steam evenly in the main chamber. The timber is carefully stacked on the trolley allowing space all round same.

The trolley is then drawn into the chamber, the doors are secured and the ventilators closed. Steam is then admitted for a certain number of hours, and subsequently superheated steam for a further number of hours. During the whole process, the temperature must be constantly tested, and regulated to conform to a tabulated list, which, however, varies according to the thickness, kind, and initial state of the timber, and the atmospheric conditions prevailing, all of which factors have to be taken into consideration.

The time of steaming varies between thirty and thirty-six hours, during the whole of which supervision is necessary.

When the processes of steaming and superheated steaming are completed, the supply of steam is shut off, the ventilators are fully opened, and the fire under the superheater allowed to die out, so that the temperature in the chamber may gradually cool.

Volumes of vapour are at first emitted, but these rapidly diminish, and cease altogether within about twenty-four hours after steam has been shut off. The temperature is then tested, and if it is within about 15 degrees of normal, the doors are slightly opened to assist in ventilating the chamber. The doors, however, are not fully opened before thirty-six hours after steaming, or until the temperature inside the chamber is within five to ten degrees of that outside.

The timber is then removed into sheds, and providing the treatment throughout has been properly carried out, within about fourteen days' time the timber is equivalent to seasoned wood.

Timber is not diminished in bulk or decreased in strength by this process; in fact, the tests carried out by the author go to show that if anything the strength of timber is increased by the process.

The theory of the process is that moisture in the timber is expelled by its conversion into a more fluid state, by opening the pores and ducts of the fibres, and allowing steam and then superheated steam to permeate the material, and the heat in the chamber and the timber will assist in expelling the moisture, etc., after the steam is shut off. We find that resin in soft woods flows to a small extent, but this is not of great importance. Also, any shakes that may be in the timber are slightly increased, but the process does not produce shakes.

The Planning of Modern Churches.

Mr. C. Spooner, F.R.I.B.A., in a paper read before the Birmingham Architectural Association, expresses the opinion that the best form of plan is a short parallelogram, or a horse-shoe shape with aisles or passages at the back of the seats leading to gangways between the blocks, and there could be no objection to one gallery around. Unless the strictest economy is necessary, a dome would be perhaps the best form of roof, or a curved ceiling. Architecturally such a building might be quite a beautiful thing. No attempt should be made, as is so often and so unsuccessfully done, to adapt a mediæval church to the purpose.

The altar should stand three steps above the level of the chancel, each of which should be at least 1 ft. 6 in. wide, with a space in front of the altar of 3 ft., and there must be a space of 5 ft. between the nose of the second step and that of the third, but if there is to be a communion rail, it should not be less than 5 ft. 6 in. The communicants kneel upon this lower step, and a rail is almost necessary for old or infirm people, but it need not reach right across; a wide opening may be left in front of the altar, which looks very well. Then a clear space of 4 ft. must be allowed westwards from the nose of the communicants' step, and more if possible. This is the irreducible minimum of space necessary, and more should be allowed unless the strictest economy forbids it.

There is some difference of opinion whether the choir should be in the chancel or in a gallery at the west end—and there is much to be said for both. I think the older tradition is for the chancel. Whether the choir be in it or not, a good-sized chancel should always be provided. It may or may not be separated from the nave by an arch, that will depend on the construction of the building; but if there is an arch it should be lofty; a low chancel arch prevents the celebrant at the altar from being properly heard in the nave, and makes too great a separation between the nave and chancel.

In S. Agnes, Kennington, by G. G. Scott (which is among the most beautiful of modern churches), the chancel is equal to the nave in height. The omission of an arch between nave and chancel is no detriment to a very fine effect. But some mark of division is certainly advisable. A screen is perhaps the best way of doing this. Whether a dwarf screen, or such a one as Bodley has put at Holbeck, which runs across from aisle wall to aisle wall, would, of course, depend upon the plan of the church and its general character. The only change of level required for ceremonies from the nave to the altar I have already spoken of, viz., three steps, one each for the celebrant, deacon, and sub-deacon. A kneeling desk may very well be provided for the communicants, if for any reason it is wished to have the fewest possible steps. The altar is necessarily a small thing in a big building, and because it is the chief

thing in that building, at which the highest act of worship is made, strictly speaking, to enclose and protect which the church itself is built, it is obviously well to give it the greatest possible importance and dignity. No better way has yet been found, I think, than that of raising it on several steps; but it is not always, indeed, I feel inclined to say it is seldom desirable to raise the chancel much above the nave—one or two steps are better than three. The place for the steps is therefore between the choir and the sanctuary, as at S. Agnes, Kennington.

The size of the choir is a matter for each parish to settle for itself, and will depend upon local conditions. There is no reason why a small church should not have a large choir, or a large church a small one, if that suits the parish. Nor is there any reason why space should not be allowed for a good-sized choir, even if at the time of building a small one seems enough for the place. Conditions change, and space is seldom or never inconvenient, and always has a fine effect. I think one ought to allow 22 in. in width for each man—24 in. is the width to allow, if possible; 20 in. is, I think, too little, but it is very usual.

Sufficient room must be allowed for the men of the choir to kneel comfortably. It is not easy to sing while kneeling, and the difficulty is increased by being cramped; there should be not less than 2 ft. between the edge of the seat and the back of the desk. The desks should be wide enough for good-sized books to lie upon, and should only have a slight slope; they should not be too high (about 2 ft. 5 in. above the kneeler is a very comfortable height), or singing while kneeling becomes too difficult.

The clergy seats may be at the end of the choir seats in a line with them, or may return against the screen, facing east, which is perhaps the better plan.

It is a tradition in England for the font to stand at the west end of the church opposite the altar, and I believe one of the canons order it to be there, but I have not been able to verify this. It adds dignity to raise it above the level of the nave floor. Plenty of space should be allowed round it for the god-parents of those who are to be baptized. A font should be made of stone or metal. If the stone is at all porous it should be lined with metal, and it should always be provided with a wastepipe leading to a sump in the ground below.

The ritual of the Roman Catholic church suggests that the baptistry should be a separate place opening out of the church, or even outside it; so a Roman Catholic church would naturally differ in this respect, as well as in some others, but the differences are not great, being mostly small details to suit the difference in the two rites.

The pulpit may be in any convenient place. It is a platform from which to address the people present in church, and should be put where the largest possible number of people can hear and see. It may be of any material, and there is much to be said for a movable pulpit which can be put anywhere that it may be wanted in the church. Generally, I think the south side will be found to be the best place, because the

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preacher has the bulk of the people to his right, and, except in a small church, a little way west of the chancel.

The traditional scheme for a church consists of a nave with an aisle on each side, and a chancel the width of the nave, or sometimes narrower, at the east end of it. If the aisles run as far as the sanctuary, and the supports for the roof are not very big or numerous, this makes a convenient church. The next problem is how to roof it and light it. Unless funds allow of considerable height, it is, I think, a mistake to attempt a clerestory. I know of nothing which looks poorer or meaner than a clerestory and low aisles with a lean-to roof. I do not know of a single instance of that scheme being successfully treated, but there are scores which prove how hopeless it is. Spacious aisles on each side of the nave of a good height with lofty windows will give a very much better effect, but the main light must be from the west window, the side windows being supplementary.

I think the light pouring in from the west end of a church is one of the best ways of lighting it. The roofing of such a plan presents difficulties. The obvious way is to run three separate roofs parallel with each other over the three aisles, which means, of course, very long internal gutters. If these get choked at any time water runs into the building, and does damage. In places where such gutters can, and will, be attended to regularly, the objection is, of course, greatly lessened, but still it is permanently there. Another way is to span the whole width of the church with one big roof. Sedding did this in his church at Ealing, and I have myself done it in two cases. It certainly makes a very big roof, but within limits I do not object to the effect. One drawback is perhaps that it makes repairs rather difficult. A series of gables over the aisles is another way out of the difficulty, but I do not think a satisfactory one. It is expensive, and cuts up the roof over much. Possibly a pitched roof over the nave and flat roofs over the aisles might solve the problem, but the outside would need skilful handling to produce a fine effect.

The supports carrying these roofs and dividing the nave from the aisles should be as small on plan as may be, so as not to have an attenuated appearance, and should not be more numerous than necessary.

If there is a loft over the chancel screen it may very well be used for the organ, which can be partially bracketed out from the wall on either side and partially in a shallow transept or recess. This plan, however, is rather expensive, and a cheaper way has to be found in most cases. The cheapest form of organ is, I believe, that known as a "four-poster," *i.e.*, one standing all together in a short parallelogram with a post at each corner to hold the inclosing rails. The bellows are below inside, with the swell box over, and the large pedal pipes range along the sides. Over the keyboard stand the metal pipes which can be grouped and arranged in a great many different ways without adding to the cost.

It is necessary generally to accept this fact and provide a sufficient space for the instrument. Now, if it stands on the floor of the aisle beside the chancel, it nearly always blocks out the altar from those sitting in that aisle, which, I think, is a great objection. In such a case the best way is, as I say, to make a loft for it so that there is a clear space under, through which the altar may be seen.

Another important part of a church is the vestries. Two at least should always be provided, and they should be as large as possible, within reason. Sometimes the fall of the land allows of their being put under the sanctuary, which is an excellent arrangement, and generally allows ample room.

An entrance to the chancel should be contrived immediately west of the communicants' step, but it should never be into the sanctuary itself. Or it may even be west of the chancel, should that be more convenient, and it may be on either side. The doors to the vestries should be wide and high—they very seldom are—and the procession has to edge and shuffle out and in as best it may.

I have said nothing about seats for the people. My own feeling is very strongly for chairs. I think they look much better than pews; they seem to me to block the floor space less. But they must be large enough and sufficiently far away from one another both in width and depth to allow for kneeling, and the backs must be low, say 2 ft. 6 in., or kneeling for any length of time becomes something of a torture to any who are at all feeble or inactive. The least space that is practical at all for each person is 20 in. of width and 3 ft. of depth, but this is not really enough, except for small people, and it ought, wherever possible, to be increased to 2 ft. of width and 3 ft. 6 in. of depth. No rails of any kind should be allowed between the front legs of the chair or under the seat lower than a clear $12\frac{1}{2}$ in. from the floor. If the chairs are spaced 2 ft. apart there will be ample room for men's hats between the chairs.

It is almost necessary to batten the chairs together and to fix them on the floor, but this should be done in such a way that the groups can easily be removed for cleaning or other reasons. The alleys should always be as wide as possible, the central one never less than 5 ft., and the side ones than 4 ft.

Doors to English churches are far too small, in my opinion. I think one should aim, whenever possible, at doubling the width and more than doubling the usual height. The doors should be carefully considered and placed for ready incoming and outgoing, and arranged to avoid draughts—by no means an easy matter. I cannot bring myself to tolerate a revolving door.

Heating is an important matter which should be most carefully considered and arranged for. My own opinion is strongly in favour of hot water (not steam), with radiators, until the day when electricity becomes cheap enough to be practicable. That is, I think, the ideal heating agent, and will disfigure a building less than waterpipes and radiators.

Every church ought to be ventilated with sufficient and proper fresh air inlets, arranged for the air to be warmed in winter on its way in without being scorched, with means of removing vitiated air from the building. This is a difficult matter, even when there are ample funds. Ventilating engineers have not yet succeeded in ventilating a large building like a church satisfactorily without disfiguring it, but much has been done, and every new church ought to be ventilated as well as possible.

There is no doubt that it is much easier to arrange for this when the church is ceiled in some way, rather than when it has an open roof. Now that timber is so scarce there is every reason to modify the use of open roofs, which look very poor unless the timbers are of large scantlings. Large scantlings, except in American grown timber (which is not fit to use in our damp climate), or in oak, which is generally too expensive, are not to be obtained any longer.

I have said nothing about external effect or style so-called. I am of opinion that the less we think about style, I mean the so-called historic styles, the better. By this I do not mean we should not study the work of the past; quite the contrary. I believe many of us do not study it enough. But we must do so, to learn how effects are produced, in a critical and analytical way, and not to save us the trouble of thinking for ourselves, nor with a view of trying to reproduce it. We shall each have our preferences, and I hope we shall have them strongly, even in a way narrowly. I believe our own work will gain in quality and vivaciousness. But we must study work of all periods and all countries. Since a natural living tradition was killed by the classical revival, we have gone on from one revival to another, till we came to the fashionable one of to-day, a revival of a revival. About the most dead, dismal, and dull thing imaginable, which is labelled 'scholarly' by its advocates. An unconscious irony; surely scholarly is the very last thing that a work of creation ought to be, or, indeed, can be.

The art of architecture is that of beautiful building. We cannot build without knowledge—knowledge of material and construction, and the laws of stress and strain; and surely it is in the fitness of things that these should be expressed, not hidden?

That is the kind of scholarship that an architect should show. Any other that he may have will all be to the good, and make him a better man, but he must not try and show it off in his buildings any more than in his ordinary talk and dealings.

But a work of architecture must show more than knowledge; it must have some of that divine spark which no amount of study can generate. It is a Heaven-sent thing which I believe very many can get by sincerely trying to express their feeling of beauty in the most direct and unaffected way. Really trying to express beauty in terms of building material, because they feel the thing intensely, and not to gain praise or reward. That, and only that, will give life to art. And shall we presume to offer less to Almighty God in a building which is to be to His honour and glory?

America as a Training Ground for Architects.

The architecture of America, says a writer in Indian Engineering, has risen to be the equal in every branch—monumental, commercial, domestic, ecclesiastical—of the best examples in Europe, while the technique of the American architect is more exact and detailed than that of his European rival. In the States no quantity surveyor is employed, and consequently the architect's assistant is called upon to turn out drawings with such finish and detail as will enable tenderers to make correct estimates for themselves. The architect's assistant of to-day is, of course, the architect of to-morrow; and so it has become the rule to send out of the architect's office drawings to such a scale, and with so much detail, as to permit of their being used at once as working drawings. It will be seen therefore that in this way the fees of both a quantity surveyor and of an intermediate draughtsman are sayed. and the architect is justified in claiming a higher scale of remuneration than is the practice in Europe. The United States fee is usually 6 per cent. as against 5 per cent. elsewhere, and the assistant's salary 16 per week against 15 per week in Europe. The scale of general detail drawings is \(\frac{1}{2}\) in, to the foot; and of special details, where they need not be full size, \(\frac{3}{4}\) in. to the foot. With drawings to these scales, furnished by the architect himself, a clerk of works is dispensed with and only a foreman employed, work progresses more rapidly, and there are fewer chances offered for friction and errors

Here then are a few facts to be pondered over. Under the circumstances would not America be the best place to send a student to for learning architecture? We have heard, and what little personal experience we possess confirms us in the belief, that a student in an English architect's office mostly wastes his time. His duties have a very limited range extending often from those of an office boy at one end of the scale to those of tracer at the other end; and when his studentship is over and he has after many failures succeeded in entering an architect's office as assistant, he is kept on irresponsible duties for such a length of time that it is many years before he will really be doing an architect's work; and it is only by extreme perseverance and unflinching patience that he may, when past his best years, come to be recognized himself as an architect. It is not so in America, where they have no time to waste in mere preliminaries. The architectural student and assistant are plunged at once into the essentials of their calling, and rapidly become experts. It is there then that the lad should, if possible, be sent, who has limited time and a limited purse, for a training. He will find himself in five years better equipped for his business than he would be in ten years in a London office.

By H. GUICHARDE TODD, F.S.A. (Scot.), M.S.A.

"It is worthy of observation, that in human life—at least in human institutions—our movements are very eccentric, and that when we progress, it is generally last in those things in which it ought naturally to be first. There is an inertia in morals as well as in physics; the first impulse is from without. In law, in physics, in politics, in parliament, nay, in art itself, rarely has any reform, any improvement, ever been made or proposed first by lawyers, physicians, politicians, or artists; and so it is in education; nobody in his senses ever yet dreamed of a University reforming itself, or its tutors amending, of their own will, their own discipline; or of their adopting, without first resisting with all their might, any scheme of reformation or amendment proposed by others."

The foregoing appeared in the London University Magazine many years ago, and it is interesting to note that there are at the present moment two exceptions to the rule there given, one emanating from Mr. P. J. Hartog, M.A., B.SC., Academic Registrar of London University, and the other from the Architectural Profession.

Mr. Hartog is dissatisfied with our examination system generally, and wishes inquiry and adequate reform if necessary in the interests of national efficiency, while the architectural profession is studying the possibility and advisability of instituting statutory examinations in the interests of architectural efficiency. These enquiries may be followed by drastic reform, but the important point to architects is, that, unless they put their house in order, they may find reform suggested forcibly from without. Mr. Hartog, in a paper read before the Royal Society of Arts, on February 1st, on "Examinations in their bearing on National Efficiency," suggested a Royal Commission to investigate and report upon the methods and efficiency for their purpose of examinations carried on by Government Departments and other public bodies in the United Kingdom; to inquire into the influences of examinations on the previous education of candidates; and to suggest such changes as may seem desirable."

This proposal received unqualified support from the Earl of Cromer (the Chairman), and other distinguished men, and it is inconceivable that a Royal Commission, "with paid Committees of experts in different subjects," would overlook such chaos as exists in the Architectural Profession. Mr. Hartog is an acknowledged authority on educational matters, but appears to be labouring under a serious misapprehension as regards the practice of the architectural profession, for he says, "The public demands that persons on whose services it relies, but for whose failures it cannot be compensated (as they can by a business man who fails to fulfil his contract), should produce some certificate of competency based on an examination, and often on a series of examinations beginning in childhood, and prolonged into early manhood

and beyond. "Teachers, lawyers, doctors, dentists, engineers, architects,* and the civil, naval, and military servants of the Crown, on whom the organization and defence of the Empire rest. must* pass examination tests, and in many cases their whole career is determined by such tests."

A very large section of the public, in the author's experience, is under the same misapprehension as Mr. Hartog, and tacitly demands that the architect should possess some certificate of competency and responsibility, and assumes that any person describing himself as an architect has a legal right to do so in common with "lawyers, doctors, and dentists."

Examinations, which are accepted as tests of competency, and the passing of which confers abbreviated descriptive titles, have become part of our social as well as educational system, and are generally accepted as proofs of efficiency and standing. They have come to stay, and are necessitated by the complications of our social life and the temptations of professional practice. Examinations are necessary, but the necessity is to be regretted. The knowledge gained in preparation for an examination, and retained after examination, is the really important matter, and it is incumbent on all to see that our examinations are devised to be beneficial to the examined, and through them to the public which they serve. It is unfortunate that the average man is not naturally a student, but examinations and the necessity for study entailed have been most beneficial to the general progress of knowledge and education.

Examinations in their present application are of comparatively recent origin, more particularly in the architectural profession, but every day makes it more clear that in the unregistered professions the examined and apparently qualified man is preferred to the unexamined and apparently unqualified.

Under Statutory Registration and Qualification architects would still be good, bad, and indifferent, but the proportion of the utterly bad would necessarily be less, and the proportion of utterly bad buildings would be diminished.

In the architectural profession, qualified practitioners are necessary to raise the profession and carry on tradition, and qualifying education rather than competitive examination appears to be a fitting aim for the architectural student.

Mr. Hartog says, "The difficulty of an examination is apt to be confused with its efficiency," and if architects can only agree as to the best training for the practice of architecture and enforce such training the examination would be a very secondary matter and free the profession from many of the psychological difficulties which now disturb the occupants of the examination hall.

Architectural examinations are to some extent stereotyped, and coaches cram students up in the points most likely to be raised. The whole tendency is to get through the examination somehow, and the educational value of the knowledge

acquired is to a very great extent lost. The examination is considered something to be got over, the preparation is usually hurried and the knowledge rapidly forgotten. There is no necessity for systematic training or sustained study, and even if it were possible to re-organize the existing architectural examinations, it is very hard to imagine any great improvement under existing professional conditions.

The machinery which would be formed under a measure of Registration should be applied primarily to architectural education, and as under Registration a new set of circumstances would arise, it is reasonable to suggest that the possibility of a new system of education in keeping with those circumstances should be considered.

Under Registration it will probably be proposed that pupils and students should be registered on entering a registered practitioner's office or an architectural school approved by the central authority, but the mere passing of an examination will not inevitably prove that the candidate's training has been properly conducted or that he has taken advantage of such opportunities as have been available. Design and the ability to execute suitable designs is the chief necessary attribute of the architect, and due attention should be paid to design in the education of students. Our students are distributed all over the country, and the provincial architectural societies would probably welcome any comprehensive scheme for education in the provinces as distinct from the centralization of study necessary in the other registered professions of Medicine, Law, and Dentistry.

The office training of an architectural student is seldom, if ever, adequate, and private study is necessary if any width of view is to be gained. The Registration machinery could be utilized to regulate this private study, and if all pupils were given a choice of subjects for a complete design to be prepared and submitted in each year of pupilage, and these designs were criticized firstly by the Local Society, and secondly by the Central Authority, a great impulse would be given to the study of design, not only in the case of the pupils, but of the profession generally. Such a system could be amplified as necessary, and the submission of measured drawings, sketches, and working drawings would give the Central Authority a very clear understanding of the working of the profession.

The public would also gain a very clear understanding of the profession and its functions, materials would be at hand for periodical exhibitions of interest and magnitude, and architectural education would soon be as well understood as medical education, with the additional advantage that through these exhibitions some appreciation of the aims of the architectural profession would become general, and art in architecture be better understood.

This educational idea might be developed so that no final examination would be necessary, and on the completion of satisfactory articles, training, and experience, the candidate, if approved, would apply for Registration and a diploma of efficiency from the Central Authority or Council, election to be by ballot of the Council on the

merits of the work of the candidate as registered during the years of his pupilage or training. Such registration would entitle the individual to practice and describe himself as an architect, but admission to existing examining bodies would remain as at present. The suggested supervision of students' work would really be examination of a protracted and logical description, and likely to lead to general efficiency. Education is much more important than examination, and many non-registrationists object to the policy of Registration, because the existing examinations in architecture are in their opinion no real proof of efficiency and do not appear to be an essential of any registration measure, if that measure is to be in the interests of art and general efficiency.

Visit to Works.

The New Wesleyan Connexional Hall, Westminster.

A party of members visited these Works on March 11th, by kind permission of the Architects, Messrs. Lanchester & Richards, Ff.R.I.B.A. The Clerk of the Works, Mr. E. T. Howell, explained the plans and afterwards conducted the party over the building from basement to dome.

The interest centred chiefly in the construction of the Inner Dome. The dimensions between the walls are about 130 ft. 0 in. There are four main girders of 66 ft. 0 in. span, carrying four others of 50 ft. 0 in. span, set diagonally and forming an octagon which supports the segmental dome of 84 ft. 0 in. clear span with a rise of 16 ft. 0 in. This dome is framed of 16 ribs radiating from a circular opening of 11 ft. 0 in. diameter (utilized as an air outlet), and braced by seven rings, three of which only are thrust rings, forming coffered panels on the soffit. The pendentives are pierced by circular window openings 10 ft. 0 in. in diameter. The whole was designed and carried out in the Kahn System, presenting an unique example of reinforced concrete construction.

Model Dwellings (Sutton Trust).

By the kindness of the Architect, Mr. E. C. P. Monson, F.R.I.B.A., M.S.A., Member of Council, a visit was made to the model dwellings of the Sutton Trust in the City Road, on March 25th.

The Architect and the Clerk of the Works met the members and conducted them over the buildings, which demonstrated the adaptation of some of the latest principles and ideas relating to the problem of housing the working classes.

We hope in another issue to give an illustrated description of these buildings.

The Licensing of Engineers.

The American Society of Civil Engineers does not believe in Licensing or Registration, but they have drawn up a model Engineering License Bill which they recommend to the consideration of the Legislature of any State who may be contemplating the passage of such a Statute.

Section 1 of the draft provides that after a fixed date, no person shall practice civil engineering within the meaning of this Act in the State, unless authorized by license from the State Board of Engineering Examiners, as required by this act.

Civil engineering, within the meaning of this Act, is defined as the practice of any branch of the profession of engineering other than military. Said profession embraces the design and supervision of the construction of public or private utilities, such as railroads, bridges, highways, roads, canals, harbours, river improvements, lighthouses, irrigation works, water supplies, sanitary and drainage works, of works for the development, transmission, and application of power, and of electrical, mechanical, mining, industrial, hydraulic, municipal, sanitary, structural and other works which require experience and the same technical knowledge as engineering schools of recognized reputation prescribe for graduation.

The enumeration of any public or private utilities or works in this section shall not be held to exclude from said profession the design and supervision of other public or private utilities or works which require experience and like technical knowledge.

After providing for the machinery to administer the Act, the qualifications of Candidates for examination are set out as follows:—

Section 7.—The Board shall admit to examination any Candidate who pays a fee of ——— dollars and submits evidence, verified by oath and satisfactory to the Board that he is more than twenty-one years years of age, is of good character, has been engaged actively in civil engineering work, as assistant or otherwise, for at least six years, and has had charge of engineering work for at least one year, or, is a graduate from a school of engineering of recognized reputation, and has been engaged actively in civil engineering work, as assistant or otherwise, for at least four years, and has had charge of engineering work for at least one year.

The Board shall issue a license, upon due application therefor, and the payment of a fee of ——— dollars, within one year after this Act takes effect, to any Candidate furnishing evidence satisfactory to said Board that the Candidate is qualified for admission to examination as prescribed in Section 7 hereof and has practical civil engineering for an additional period of not less than four years immediately preceding. After the expiration of said period of one year, the Board shall issue licenses only as hereinafter provided.

After dealing with the organization of the examinations and the issue of licenses to successful Candidates the draft provides that the Board shall, from time to time, examine the requirements for licenses in other States, and shall register those in which, in the judgment of said board, standards not lower than those provided by this Act are maintained. Upon the presentation, by a resident of a State so registered, to the Secretary of said Board, of satisfactory evidence that he holds a license issued by proper authority in such State, or upon the presentation, by a civil engineer resident in a State not so registered, of satisfactory evidence that he is qualified as prescribed in Section 7 hereof and has practiced civil engineering for an additional period of not less than four years immediately preceding his application, accompanied in either case by a fee of _______ dollars, the Secretary shall issue to him a license to practice civil engineering in the State of _______, whereupon the person to whom said license is issued shall be entitled to all the rights and privileges conferred by a license issued after examination by the Board.

Before any license is issued it shall be numbered and recorded in a book kept for that purpose in the office of the Board, and its number shall be noted on the license. This register shall be open to public inspection, and in all legal proceedings the same or a transcript of any part thereof, certified by the Secretary of the Board under its seal, shall be entitled to admission in evidence.

No unlicensed person shall qualify as a witness before any State or Municipal Court as an expert in civil engineering.

No map, plan, or drawing required by law to be certified or approved by a civil engineer shall be accepted or filed by State or Municipal authority, unless the certification or approval is executed by a person duly licensed in accordance with the provisions of this Act.

The remaining Sections deal with the revocations of licenses and penalities for authorized practice, etc., and the draft concludes with a statement to the effect that this Act shall not apply to engineers working for the United States Government; nor to any engineer employed as an assistant to an engineer licensed to practice civil engineering in the State of ————; nor to any engineer coming from another State and employed by the State or any Municipality, Corporation, firm, or individual therein, until a sufficient time shall have elapsed to permit the licensing of such person.

Registration of Architects in Illinois.

The Seventh Biennial Report of the Illinois State Board of Examiners of Architects, covers the proceedings of the years 1909 and 1910. The License Law, says *The Building News* has now stood the test of thirteen years' experience, and thus far has not been affected by any decision in the courts of law. Several other States have enacted laws following the main features of that of Illinois, since it was enacted; but all fall short of its effectiveness. These States are California, New Jersey, Colorado, and Louisiana. The most faithful copy of the Illinois law has been enacted in the Province of Manitoba, Canada. The Illinois law has twice been amended to great advantage.

In the last Biennial Report it was shown that nearly one-third of the licenses had lapsed in ten years, though the total number in force had remained nearly stationary. It was shown that where there had been a loss in the number who had been licensed in 1897-8, without examination, as the law provided, their places had been taken by persons who had passed examination, as the law provided, and received certificates showing that they were qualified to practise their profession.

The experience of two more years has shown a still greater proportion of certified architects to the whole body of the profession. Out of the whole body of seven hundred and fifty-four (754) architects now practising under the law, three hundred and nine (309) hold examination certificates.

This shows that very nearly two-fifths of the architects have examination certificates, while two years ago the proportion was one-third. But it is not to be inferred that the two-fifths comprise only those who are competent to practise. It comprises mostly the younger element, the cream of the young men who are graduating in large numbers from the State University and others which give instruction in architecture, as well as the apprentices who have served in the offices of the older and more experienced architects. It comprises also a considerable number of architects residing in other States, who are not barred by law from practising in Illinois, but are required to demonstrate their ability before the Board by their executed works and exhibits showing their proficiency in planning and construction.

There remain also in practice four hundred and forty-five (445) of the original seven hundred and six (706) who were granted licenses without examination thirteen years ago. Among them may still be found the most eminent men in the profession. The lesser lights are also comprised in the four hundred and forty-five, some of whom have already experienced the chastening discipline of the Board, while many others have profited by its admonitions. For while the severe penalty of the law for such offences as dishonest practices, incompetence, and recklessness in revocation of the

license and practically puts the offender out of business, there are many practices which do not involve this penalty. When they come to the knowledge of the Board from any reliable source, the offender is asked to come before it and is given an opportunity to explain his conduct. An honest admission generally leads to a mild admonition, rather than a severe reproof, and the offender is almost invariably benefited by the discipline which the Board inflicts. In some cases there are developed facts which convince the Board that a legal offence may have been committed, and then the parties are put on trial, and have the full benefit of counsel and witnesses. There has never yet been an instance in which an architect has been asked to appear before the Board at any of its meetings that the invitation has been refused.

Four licensed architects have been tried before the Board for offences under Section 10. In two cases the license has been revoked, in one case the prosecution failed for want of sufficient evidence and the charge was withdrawn after a trial continued through five sessions of the Board, and in another, the architect was acquitted with a reprimand after a trial continued through three meetings.

Three persons have been prosecuted and fined for practising architecture without a license.

As has been the case ever since the law has been in force, the Legal Committee and the Secretary have discovered many incipient attempts to violate the law, many of which have been due to ignorance. Where the parties involved had not proceeded too far a warning by letter has proved a sufficient deterrent.

The Secretary has been repeatedly called upon by architects and others for information as to the bearing of the law upon certain questions that have come up in architectural practice, and has frequently arbitrated matters of differences between architects and owners, and architects and contractors in a quite informal way, and with the result of preventing legal disputes between them.

Numerous complaints are made by architects at the office of the Board which, upon investigation, are shown to have no legal foundation. These are generally the result of ignorance of the law. Copies of the Biennial Reports are always mailed to all the architects, and as they contain copies of the law and rules of the Board, there is no sufficient reason for this want of information.

One of the practices which the Board has had great difficulty in regulating, is the association of licensed architects with engineers—either in co-partnerships or as incorporated companies. There are several firms and corporations in Chicago in which it appears to the Board that attempts are being made by engineers to practise architecture under the sheltering wings of architects. But where the associations exist they are always with the connivance of the associated architect, so that both are equally to blame. Such architects have been called before the Board in several instances and, while having asserted their desire to conform to the law in its presence,

Registration of Architects in Illinois.

have continued their practices as soon as they were beyond its precincts. Under the law it is only possible to proceed against the engineers in these partnerships or corporations in the courts, and to call the architects before the Board for trial under charges preferred under the provisions of Section 10. But the latter does not appear to apply to such cases. The Board has received several legal opinions from the Attorney-General and others in past years bearing on this matter, and intends to take it up more seriously hereafter. The subject will therefore not be further discussed in detail in this Report.

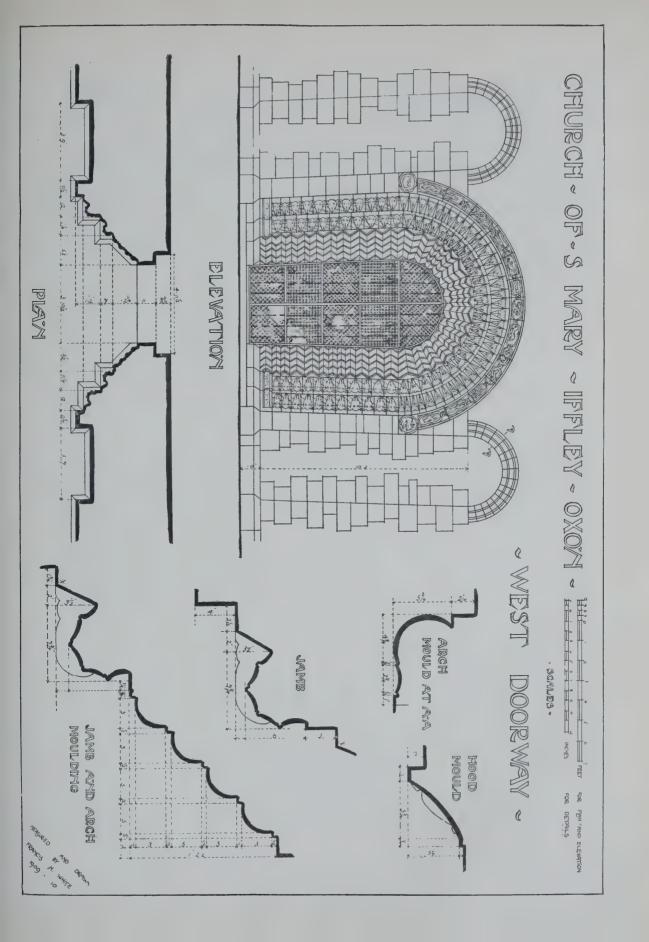
King Edward Memorial, Liverpool.

The Council of The Society of Architects have memorialized the Liverpool Corporation, deprecating any alteration in the Podium of St. George's Hall such as is threatened by the scheme for the King's Memorial. The Council suggest that an equestrian statue would in any case be out of place in the position proposed; and that it might be more fittingly placed elsewhere.

Iffley Church, Oxon. West Doorway.

This Church, dedicated to St. Mary, is one of the most beautiful specimens of Norman architecture in the district. The probable date is about 1160, and the building represents the last stage of pure Norman, just before the transitional features began to appear.

The western end has a grand Norman doorway, such as is characteristic of Norman edifices. It is lavish in zig-zag ornament, and affords a splendid opportunity for the study of Beak-Heads. The outside hood moulding is carved with a variety of figures in ovals forming a sort of chain pattern, some of the figures being apparently signs of the Zodiac. Inside this is a complete row of Beak-Heads, fifty-nine in number, extending all round the doorway. Then a second row of Beak-Heads occur fifty-one in number, and receding from these are four rows of zig-zag mouldings with plain inner jambs. The effect of the whole is very ornate, and this is heightened by the plain shallow arcading on either side.



The Legal Authority of the Architect.

Some years ago, Mr. A. Montifiore Brice, Barrister-at-Law, read a paper before The Society of Architects on "The Legal Liability of the Architect," which he has now supplemented by a paper dealing with "The Legal Authority of the Architect," read recently before the Architectural Association, of which the following is a summary:

The authority of an architect, says Mr. Brice, flows from the terms of his employment as the agent of his employer, and in practice is generally limited (so far, at least, as the relations between the building owner and the builder are concerned) by the terms of the building contract. On the other hand where the building owner does not enter into a formal agreement expressing the conditions upon which he delegates his own authority to the architect the limits of that authority must be sought elsewhere than in a formal contract.

Where the architect is the general agent of his employer to the extent of the usual employment of an architect, then he possesses the full apparent authority due to his position, and his employer is bound by all acts of the architect which come within that authority, but where the authority of the architect is defined by express terms such limitation must be strictly observed. Any infringement of such authority by the architect would release the employer from liability, and render the architect himself liable in damages to injured parties.

The authority of the architect, whether general or limited, usually extends to his doing all acts required in the process of obtaining tenders and making drawings for and supervising the erection of or addition to the building, for the purpose of which he has been employed, but if an architect be employed merely to make drawings, he is acting as an independent contractor, a skilled draughtsman, or professional man, and, as no question of agency arises, no question of authority can follow. But if he is making drawings for delivery to the builder, a question of authority can enter as to the warranty that they are correct or that the builder can work to them. But no such warranty can be implied, nor would such warranty appear in any properly drafted building contract, and if the architect should be so foolish as to warrant such accuracy or possibility to the builder it is he and not the building owner who would be liable to the builder, for it is the architect who has exceeded his express authority.

When the architect has power to order extras he has not, in consequence, the implied authority to order as extras the execution of omissions on his drawings, nor when his drawings are not practicable has he any implied authority to order as extras work to be done that will render them practicable.

No implied authority rests with the architect either to obtain tenders or to enter into contracts with a builder. Neither is he authorized to negotiate for advances or undertake any preliminary work of this character without an express authority from the owner. If, on the other hand, he has such express authority, he can bind the owner for any reasonable expenses to which he may have been put in the course of conducting such preliminary work.

Though an architect has authority to make drawings for the purpose of the works he has no implied authority to make such changes in those drawings as would destroy the original scheme. But he has an implied authority to supply drawings of details not shown in the original plan.

It has been held that an architect has, when authorized to obtain tenders, an implied authority to engage the services of a quantity surveyor to supply quantities, although it is doubtful whether such architect has any implied authority to take out those quantities himself. But the quantities must comply with the limitations of the architect's authority, and if he be authorized only to obtain tenders not exceeding a certain amount, then he can only have the implied authority to obtain quantities within that amount.

In the absence of a limit of price in the contract, the architect has an implied authority to order works for which the builder may recover the price, even though, as a fact, the employer has privately given such limit of price to the architect. As long as the authority can be properly implied, the builder can maintain his claim against the building owner, and it is for the latter to recover damages from the architect for exceeding his authority.

The architect has not an implied authority to dismiss a builder, and consequently any authority so to dismiss must be expressed, and is usually put into the contract. If put into the contract it must be specific and must indicate a particular person.

An architect has no implied authority to bind his employer for the expense consequent upon sub-contractors of the contractor carrying out the orders of the architect, whether by way of original work or of deviations. Nor has he an implied authority to incur on behalf of his employer any liability to specialists unless such specialists can be shown by the terms of the contract to be employed by the building owner. If such specialists are, in fact, the sub-contractors of the principal contractor, then no certificate of the architect can entitle them to claim payment from the building owner; nor can the contractor claim damages from the building owner in respect of any delay caused by such specialists.

The architect has no implied authority to vary the building contract. His authority, on the contrary, directs him to see that its express terms are carried out. But it is always possible for the parties to the contract to vary it by consent, and to empower the architect to authorize such variations. Where he is empowered to give directions, such directions must be within the expressed limits of the contract.

The Legal Authority of the Architect.

Similarly, an architect has not the power, unless expressly given, to represent that the building owner has varied certain conditions—often such conditions as deal with waiver. The contract, when reduced to writing, remains the final agreement of the contracting parties, and no unauthorized representation of the architect can reduce the liability of the builder or impose one on the building owner. On the other hand, should the architect make representations, before the builder has entered into the contract, as to the character of the work he will require, he would be authorized to act subsequently upon such representations, and they would not be held to be varying the terms of the contract unless those terms were inconsistent with the representations. But the making of such representations is loose and ill-advised, and leads to litigation.

An architect has no implied authority to give verbal orders when the contract provides for orders in writing, nor can he dispense with estimates in writing when such are required.

As to extras, the architect has no implied authority to vary the conditions which the terms of the contract impose in respect of these items. Nor has he authority to regard as extras such items as are absolutely necessary to complete the contract.

An architect has no implied authority to order or contract for extras, and if he abuses his powers in this respect under the contract, the builder, who is privy to the contract and yet acts on these unauthorized orders, cannot recover from the building owner.

Similarly, there is no implied authority on the part of the architect to bind the building owner by his progress certificates, unless such certificates conform to the terms of the contract. But if the architect is authorized by the terms of the contract to make a valuation which shall be binding upon both parties to the contract, then he would have an implied authority to issue certificates not so conforming.

The authority of the architect when granting a certificate in his capacity as the agent of the building owner is comprised within the range of such certificates as may be merely ministerial—that is, which do not call upon him for a final opinion dependent on the exercise of judgment and professional skill. In short, while issuing non-conclusive interim or "progress" certificates—the architect is ordinarily discharging the ministerial duty which he is authorized as agent for the building owner, and so long as he exercises all proper care, displays all reasonable skill, and acts honestly and bona-fide, and within the scope of the authority conferred on him by the contract or otherwise, he discharges his liability to the building owner. Acting in such a manner, he is under no liability to the builder, between whom and him there is no privity of contract. But as soon as his authority is extended to enable him to determine, or assess finally and conclusively, some question of fact between the parties, he ceases to be the agent of the building owner ad hoc, and becomes a quasi-arbitrator between the two parties.

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The Legal Authority of the Architect.

So, too, a contract will frequently leave many matters to the decision of the architect for the exercise of his professional judgment and skill, not as an arbitrator, who hears and weighs evidence, but as a person on whose special knowledge and capacity both parties rely. In such a case, the authority exercised in individual instances is an implied authority, which depends for its validity upon the fact that it is applied to cases which come within the clauses of the contract.

Where the architect exceeds his authority, and the builder, nevertheless, complies with his unauthorized instructions, the building owner can repudiate any claim the builder may make in respect of work done in these circumstances, unless, either expressly or impliedly, he has adopted or ratified such unauthorized instructions; and the only measure of relief then open to the builder is a claim by him against the architect for damages for breach of warranty of authority.

With respect to the architect's capacity to delegate his authority, the old maxims—"Delegata potestas non potest delegari" and "Delegatus non potest delegare"—apply to architects as to others, but it is settled law that in certain circumstances the delegate may employ subordinates to carry out the details of his work, but the architect is not entitled to put unreasonable confidence in any person to whom he may delegate his authority, even though that person may be employed by the building owner; and he would be liable in damages to the building owner if, by reason of such unreasonable confidence, he should certify for work which is inferior to the quality required by the contract.

To put it briefly, although the architect may delegate certain duties of a more or less ministerial character, he must not abdicate his position or lay down his responsibility as the authorized agent of the building owner.

Architectural Scholarship, 1911. New Regulations.

The Scholarship is for the future to be awarded for Measured Drawings, and Competition is confined to Students of the Society, who are under 23 years of age on the latest day fixed for the delivery of the drawings, viz., September 30th, in any year.

Conditions and Subject.

Candidates for the Architectural Scholarship shall be persons whose names are on the Register of Students of the Society, and who have paid their subscription for the current year. The maximum age limit is 23 years on September 30th, 1911.

Candidates are required to submit at least three and not more than four sheets of Measured Drawings and Details, of some building of historic interest.

The Drawings are to be prepared between January and September, 1911, and are to be executed on imperial size paper, and delivered carriage paid at the Society's Offices, 28, Bedford Square, London, W.C., on or before September 30th, 1911, together with the original sketches and notes.

The Drawings must be without name, motto, or other mark of identification, and must have attached thereto a plain sealed envelope containing the Competitor's signature and address appended to a declaration that the Drawings, etc., are the candidate's unaided work.

The Drawings need not be mounted, but they must be delivered flat and not rolled.

The Scholarship is of the value of £10, and will be disbursed by the Council on behalf of the holder.

The award will be made by the Council subject to their approval of the manner in which the Candidate proposes to utilize the Scholarship, or alternatively to the Candidate agreeing to such scheme as the Council may decide upon.

Should the scheme not call for the payment of so much as Ten Pounds (£10), the holder may receive the value of the balance in books or instruments.

The successful Candidate may be required, before the award is confirmed, to produce to the Council evidence as to age.

The Drawings will be numbered as received, and a corresponding number placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Council reserve the right to exhibit or reproduce the drawings, and their decision on any matter arising, is to be final.

The Scholarship may only be held once by the same person.

A candidate who does not adhere to the conditions in every particular, will be disqualified.

Forthcoming Visits.

Festival of Empire, Crystal Palace, April 8th.

By the courtesy of Mr. Herbert W. Matthews, Surveyor and Manager, Festival of Empire, arrangements have been made for Members of the Society to visit the Crystal Palace on Saturday, April 8th, with a view to seeing the work in progress in connection with the buildings now being erected for the Festival. These are of a varied and interesting nature, and comprise replicas of the Government Buildings of Canada at Ottawa, of South Africa at Cape Town, of New Zealand at Wellington, of Newfoundland at St. John's, of Indian and other Government Buildings.

The Electric Railway and various interesting features of a constructional character will also be seen.

As the numbers must necessarily be limited, and it is essential that early intimation should be received from those who propose to take part, invitations will only be issued to those who signify to the Secretary, before April 5th, their intention of being present.

Building Trades' Exhibition, May 3rd.

By kind invitation of Mr. H. G. Montgomery, the Society will pay an official visit to the Building Trades' Exhibition, on Wednesday, May 3rd. The members will meet at the main entrance at 3 p.m., and after seeing the exhibits will be entertained to tea by the directors.

Lambeth Palace, May 20th.

By permission of his Grace the Archbishop of Canterbury, members of the Society will have an opportunity of visiting Lambeth Palace, on Saturday, May 20th, at 3 p.m. Mr. W. D. Card, F.R.I.B.A., the architect to the Ecclesiastical Commissioners, who has a very intimate knowledge of the Palace, has most courteously consented to act as guide. Further details will be announced in due course.

Sketching Parties.

The following preliminary arrangements have been made by the Students' Committee, further particulars of which will be announced later.

June 10th. Amersham.
,, 24 ,, Morden College or Franks Hall.
July 8 ,, Stone Church.
,, 22nd. Oxford.

Mainly about Members.

We regret to announce the death of Mr. Morley Bray Collins, of Redruth, a Student of the Society. Mr. Collins, who was in his twenty-seventh year, was articled to his brother, the late Horace W. Collins, M.S.A., of Redruth, to whose practice he succeeded. He was one of the Senior Students, having been elected in 1901.

A Church and Sunday Schools are to be erected for the trustees of the Wesleyan Church, Stone, from the designs of Mr. William F. Bird, of Midsomer Norton.

The corporation of Hereford are about to enlarge the free library, the cost being met from a legacy supplemented by a donation from the testator's nephew. The new feature of the extension will be a new lending library at the rear of the present reading-room, with a magazine-room and librarian's office, and on the first floor an art gallery over these new rooms, approached from the existing museum. Messrs. Groome & Bettington, of Hereford, are the architects.

The new Infant Council School for Wombridge consists of four classrooms, grouped around a marching corridor, 16 ft. wide, with the cloak and staff rooms at the front. The elevation is simple, but effective, being built with Randlay wire cut bricks with white joints, relieved with artificial stone. Owing to the treacherous nature of the site, it was necessary to construct a reinforced concrete raft upon which the superstructure rests. The building was erected from the designs, and under the supervision, of Messrs. Dickens-Lewis and Haymes, Architects, of Shrewsbury.

The Tonyrefail (Glam.) Boys' Council School, erected about seven years ago, was burnt out a few weeks ago, nothing remaining but the bare walls, and they were badly damaged, as were the window heads and the square dressed polled facing, both of Pennant stone. The floors were of ordinary joists and boards, with boarded ceiling over the basement which covered about half the school floor area; the dadoes were also, as well as the ceiling of classrooms, etc., boarded. The school is now being rebuilt under the superintendance of Mr. D. Pugh-Jones, the County Architect, Cardiff, with solid concrete floors covered with wood blocks, and cement dadoes, in order to reduce the risk of fire to a minimum.

The Parish Church, Coldstream, situated in High Street, Coldstream, replaces the old Parish Church, of which the tower and belfry are incorporated in the new building. The exterior is somewhat similar in style to the old building, the chief features being round-headed windows with architraves and projecting key blocks, and the wall-head finished with a simple cornice and parapet. The dressings are of Blackpasture stone

filled in with random rubble. The floor of the Church is of wood, but the passages and chancel are paved with stone in squares, laid diagonally. Whitsome-Newton stone columns are used in the interior to support the steel principals carrying the plaster barrel-vault. Doors, seating, etc., are of yellow pine stained and wax-polished, the stalls and communion table in the chancel being of oak. The pulpit is of stone. Mr. J. M. Dick Peddie was the architect.

At the annual meeting of the West Sussex, East Hants and Chichester Infirmary, plans were adopted for the King Edward VII. Memorial Reconstruction Scheme. Mr. C. W. Ball, of Southsea, explained the plans. The rooms in the basement would be converted into stores. The nurses' dining-room would be taken upstairs and the servants' dining-room placed in the basement adjoining the kitchen. At the back several new wings would be provided. On the ground floor it was proposed to extend the children's ward by throwing it out in the front and making it L-shaped. On the next floor there would be a balcony over the extension to the children's ward, and the sanitary arrangements would be entirely remodelled. A new operating block would be placed in the centre, and the present operating theatre would be made into a sterilizing room. A surgeons' room, anæsthetic room, and a theatre would be at the back. On the top floor the servants would be provided with rooms at one end and probationers at the other, and new bathrooms would be provided for both. At the extreme eastern end there would be a nurses' house. It was at first proposed to build a chapel separate, but that would now be built off the first floor. The estimated cost of carrying out the proposals is £14,300.

Meetings for April and May.

- April 6th. Ordinary Meeting at 8 p.m. Paper on "Old English Silver Plate," by Mr. Percy Macquoid.
 - ., 8th. Visit to Crystal Palace. (Festival of Empire Buildings.)
 - ,, 11th, 12th, 13th. Examinations for Membership—London, Manchester, Cardiff, Leeds and Oxford.
 - ,, 14th to 18th. Offices closed for Easter Recess.
 - , 27th. Committee Meetings.
 - ., 28th. Annual Dinner, Holborn Restaurant.
- May 1st. Last day for submitting Travelling Studentship Drawings.
 - , 3rd. Visit to Building Trades' Exhibition.
 - " The Society of Architects Lodge Meeting, Liverpool Street Hotel, E.C.
 - ,, 4th. Smoking Concert, 28, Bedford Square.
 - " 11th. Ordinary Meeting at 8 p.m. Paper on "Hospitals," by Mr. A. Saxon Snell, F.R.I.B.A.
 - ., 20th. Visit to Lambeth Palace.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Ordinary Meeting.

The Sixth Ordinary Meeting of The Society of Architects for the Session 1910-11 will be held at 28, Bedford Square, W.C., on Thursday, April 6th, 1911, at 8 p.m.

Agenda:

- 1. The President to take the chair.
- 2. Minutes of the last Ordinary Meeting.
- 3. Nominations for Membership.
- 4. Announcements.
- 5. Ballot for candidates for Membership and Studentship.
- 6. Paper on "Old English Silver Plate," by Mr. Percy Macquoid. Ladies are invited.

Light refreshments will be served after the meeting.

Annual Dinner.

The Society of Architects' Annual Dinner will be held on Friday, April 28th, at the Holborn Restaurant. Tickets, members or visitors, price 7s. 6d. each (exclusive of wine, etc.) may be obtained on application to the Secretary.

The Students' Section.

Travelling Studentship, value £25 and a Silver Medal. Subject for 1911, A Social Club. Latest date for receiving drawings, May 1st, 1911.

ARCHITECTURAL SCHOLARSHIP, value £10. Maximum age limit twenty-three years, awarded for measured drawings, which must be delivered before September 30th.

Journal

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New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

State Registration in America.

A special Committee of the New York Chapter of the American Institute of Architects has been at work since 1904 upon the question of State Registration and Licensing of Architects. The Committee has conducted extended correspondence with architects in States where licensing laws are now in force, and with architects in New York State. It has found the sentiment among the architects in States where license laws now exist to be generally, though by no means unanimously, in favour of such laws. It has also found that a majority sentiment in favour of such laws exists among the architects of New York State. As recommended by the Committee, the delegates of the New York Chapter presented a resolution at the Annual Convention of the Institute, which was adopted, to the effect that the Institute should appoint a Committee on Registration of Architects, or on Legislation, which committee shall endeavour to secure from States having registration laws reciprocal recognition of similar laws elsewhere, with a view to obviating the necessity of an individual architect taking out a license in more than one State, and which committee may, under the Board of Directors, advise with those endeavouring to secure new legislation affecting the architectural profession. The New York Chapter has maintained a conservative attitude in the matter of the recognition of the profession by special laws beyond such recognition as should be naturally given in building laws or ordinances. It believes that such legislation should take a broader ground than that covered by any existing registration laws, and it opposes any law which does not recognize architecture as a learned profession on a plane with medicine and the law; and it holds that any legal regulation of the profession should lead toward an ultimate high standard of educational qualifications,

Proceedings.

HE Sixth Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, April 6th, 1911, at 8.0 p.m.

MR. PERCY B. Tubbs, F.R.I.B.A. (Vice-President), having taken the Chair, the minutes of the previous Meeting, as printed in the *Journal* were taken as read, and were confirmed and signed.

One nomination for Honorary Membership, twenty-six nominations for Membership and eight for Studentship were announced.

The Ballot was then taken and the following Candidates were declared to be duly elected:—

As Members:

BURKE. JOHN EDMUND, CLARKE. JOHN PERCY, CLOUGH. HERBERT HEALEY, FIELD. WILLIAM CHAPMAN, FOWLER. ERNEST GEORGE, HALE. EDWARD, HARDING. JOSEPH WILLIAM BERRY, HEATON. RICHARD ARTHUR, HIGGINBOTHAM. FREDERICK W. HODGSON. ARTHUR NICHOLAS WHITFIELD, HUNTLEY, ARTHUR. MATHESON. DONALD, MATKIN. GEORGE EDWARD, PLATTS. PERCIVAL OATES, REES. JOSEPH COOK, ROBERTS. JEREMIAH, SAUNDERS. GEORGE REYNOLDS, SCOTT. ALFRED IRVING, THORPE. OSBORNE M., WATKIN. ERNEST TELLWRIGHT, WHEAT. ALFRED,

Collins Street, Melbourne, Victoria. Regent Chambers, Wednesbury. Butts Avenue, Rochdale. Town Hall. Eastbourne. Midrise. Rothley Plain, Leicestershire. Guildhall Buildings, Birmingham. 16. Cook Street, Liverpool. 14, Victoria Buildings, King Street, Wigan. 9. Lower Sackville Street, Dublin. 9. High Street, Windermere. 22, Buckingham Street, Strand, W.C. Dingwall and Strathpeffer. Town Hall, Sunderland. 46, College Grove Road, Wakefield. Parade Chambers, Neath. 36, High Street, Pwllheli. 230a, King Street, Hammersmith. Regent Chambers, Wednesbury. 133, College Street, Long Eaton. Swan Chambers, Burslem, Staffs. 19, Basinghall Street, E.C.

As Students:-

DUPRE. CYRIL EDWARD, JEFFERY. CECIL ARDING, NURSE. HARRY, 95, Southchurch Beach, Southend-on-Sea.14, St. Aubyn Street, Devonport.Rosmont, Berlin Street, Wakefield.

The CHAIRMAN intimated that Mr. Percy MacQuoid had found it necessary at the last moment to change the subject of his paper from "Old Furniture" to "Silver Plate."

Mr. MacQuoid then proceeded with his lecture, which he illustrated by means of drawings and lantern slides.

Mr. G. A. T. MIDDLETON, A.R.I.B.A. (Past Vice-President), in proposing a vote of thanks to the lecturer, said he had felt considerable disappointment when he first heard of the change in the subject of Mr. MacQuoid's paper, as in common with most architects he knew something about the history of furniture and he wished to know more. His opinion had changed as the lecture proceeded until he was forced to the conclusion that he had learned considerably more than if the subject had been furniture. One thing which interested him more than another in the history of silver plate was the exactitude of date which it was possible to arrive at by means of the hall-marks, and there was no such opportunity in furniture or in ordinary architectural examples with which most of them were familiar. What they had heard would help all of them he thought, in their dealings with the evolution of Renaissance ornament seeing how carefully and precisely it was possible to trace the changes in the little details, and although hitherto it had been the custom to give more general dates in regard to architecture he believed it would be possible to give more precise dates in future.

Mr. Middleton asked whether it was not possible during Elizabethan times that some of the silver plate of that period was the work of Italians resident in England rather than English workmen. There appeared to be considerable difference between the ornament of the plate work and the architectural work of that date.

Mr. H. Freyberg, F.S.I., in seconding the vote of thanks, said that like Mr. Middleton he was a little surprised by the change of subject, but when the distinguished lecturer had got into his stride he felt that there was no cause for regret but rather for congratulation. The subject of art, whether it was applied to decorative ornament of architecture or of silver plate or illuminated manuscripts, brought forward those characters which they as lovers of art, so thoroughly disliked, viz., Henry VII and Oliver Cromwell who seemed to come up on every occasion. Of the silver plate of this country he thought, with Mr. Middleton, that there was a distinctly foreign influence in some of the work of the Renaissance period. One could not help being struck with the similarity of the Rosewater dish of Mary Tudor's time with the work attributed to Benvenueto Cellini at Florence. Although the latter, he believed, never got so far as England there were many of his assistants who came to this country and left their influence on the unfortunately few forms of art that were left for their enjoyment. He had very much appreciated the address given them by Mr. MacQuoid.

MR. PERCY B. TUBBS, F.R.I.B.A. (Vice-President), then formally moved that a hearty vote of thanks be accorded to Mr. MacQuoid for his interesting lecture, and it was carried unanimously.

Mr. Percy MacQuoid, in reply, said that he much appreciated the reception of his lecture, the subject of which was an intricate one to deal with in such a short space of time. Regarding Mr. Middleton's remarks there was no doubt in his mind that some of the finest plate was produced by refugees at the time when the strongest Elizabethan "motives" were in existence. They must remember that the massacre of the Huguenots, who were a very industrious sect, had taken place and it was not at all certain that the industries of France did not deteriorate very much from that time, and there was no doubt that England owed a great deal of the arts which it possessed to the great influx of foreigners or at any rate to their children, which occurred at that time. Before then, England was a very dreary place in regard to art. The interesting relationship of the workmen who came over to England occurred, of course, in the time of Henry VII and Henry VIII, in their employment of craftsmen in that marvellous house of Nonesuch which formed the first definite record they possessed of foreign workmen being employed in any kind of art in this country.

A Special General Meeting of The Society of Architects was held at 28, Bedford Square, London, W.C., on Thursday, April 20th, 1911, at 8 p.m., for the purposes of laying before the Members of the Society the general principles of a Registration Bill prepared and approved by the Councils of the R.I.B.A. and The Society of Architects, obtaining the approval of the general body of the Members to the proposals for the amalgamation of The Society of Architects with the R.I.B.A., and the passing of the resolutions necessary for carrying the proposals into effect.

Mr. Geo. E. Bond, J.P., President, was in the Chair. The signature book showed an attendance of 116 members. Fifteen nominations for membership and five for studentship were announced.

The Secretary having read the notice convening the meeting, the Chairman, first made it clear that the proceedings were private and that no reference must be made to them in the press, referred to the circumstances which led to a conference between representatives of the R.I.B.A. and of the Society on Registration and which subsequently developed into a proposal for the absorption of the Society into the Royal Institute, the two Councils having previously agreed upon the general principles of a Registration Bill as set out in the circular issued to members as follows:

^{1.} The Architectural Registration Authority shall be and mean the Council of the R.I.B.A. with the addition of nominees of the Privy Council.

^{2.} The term Architect shall mean every person who is now or in the future shall be enrolled on the Register as a Fellow Associate or Licentiate of the Royal Institute of British Architects or an Architect Member of the Royal Academies of Arts of England, Ireland, or Scotland.

- 3. Every Architect in the United Kingdom, Colonies or Dominions shall be entitled to be entered on the Register as soon as he is elected to one of the classes of Fellow Associates or Licentiates in manner provided by the Royal Charters, or as a Member of the Royal Academies of Arts of England, Ireland, or Scotland.
- 4. After 1920, except as provided in Clause 7 hereof, no person shall be permitted to practise for hire or reward in designing a building, and certifying payments in respect of the erection thereof, unless he is an Architect within the definition of this Act.
- 5. An Architect, unless he be a salaried official, shall be entitled to be remunerated for his services according to a scale of fees and charges to be approved from time to time by His Majesty's Secretary of State for the Home Department.
- 6. From and after a date which shall be five years after the passing of the Act, every County or Borough Council and Corporation of a City or Borough, Rural or Urban Council, Board of Guardians, Highway Board. School Board, Bench of Magistrates, and any other public Board Committee or Trust elected, delegated or appointed by the public, and acting in an administrative, executive, or fiduciary position, who shall hereafter erect or shall alter the exterior of any building facing any road or open space at a cost exceeding £1,000 out of funds supplied or provided by public grants, rates or other assessments, shall employ and appoint an Architect as herein defined to design, under the instructions of the employers and to supervise the erection or alteration of the said building, and to certify any payments to be made in respect thereof. Provided that the employer shall have power for sufficient cause to dismiss the Architect and from time to time appoint another Architect in his place.
- 7. In the case of bridges, railway or tramway stations, or similar buildings within the civil administrative limits of any city, borough, or village, which are primarily of an engineering character, they shall employ and appoint an Architect to collaborate with the engineer in the design and supervision of the façade or exterior of the said buildings.

Provided always that this section shall not apply to the erection outside the aforesaid limits of any building by any Railway, Dock, Gas, Water, Electric, or other Company of any factory, shed, workshop, or other similar building for the carrying out of which it is usual to employ an Engineer appointed by the said Company.

8. Nothing contained in this Act shall apply to the prejudice of any person who, previous to the passing of this Act, shall have been engaged in practice in designing or superintending buildings. Nor shall it affect the function and practice of any Engineer as such except as in Clause 6.

The Chairman commented at some length on the conditions and terms of the proposals referred to in the circular and dealt with a number of points raised by members in correspondence with him. He invited discussion on the proposals and intimated that a note would be kept of any suggestions which might be made, with a view to their being considered by the Joint Committee in working out the details of the Bill or of the proposals generally. The scheme represented the extent to which the Councils of the respective bodies were prepared to go, and they had also been approved by the general body of the R.I.B.A.

The Chairman then formally moved the first resolution as printed on the notice paper. This was seconded by Mr. A. J. Murgatroyd, Vice-President.

Mr. W. J. Jennings, J.P., Canterbury (Past Member of Council and Local Hon. Secretary), in opening the discussion criticised some of the clauses of the Bill, particularly 2, 6 and 7, and also some of the conditions and terms of the proposals. He also made a number of suggestions for the consideration of the Council. Mr. H. G. Todd, who spoke at considerable length, Mr. Ellis Marsland, Mr. Roques, Mr. Chidgey, Mr. Blackbourn, Mr. A. J. Murgatroyd, Mr. R. L. Llewellyn, Professor Rimington, Mr. P. E. Culverhouse, Mr. C. Watkins, Mr. S. H. Egan, Mr. E. J. Hamilton, Mr. Middleton, Mr. Sadgrove, Mr. Monson, Mr. Percy Tubbs, Mr. Watkins and Col. F. S. Leslie also took part in the discussion.

The resolutions as printed on the notice paper were then put from the Chair and it was resolved:

"That The Society of Architects hereby expresses its approval of the proposals laid before it in the above statement"

It was further resolved:

"That The Society of Architects, founded 1884, be amalgamated with the Royal Institute of British Architects, and that such amalgamation be effected by transferring the undertaking of this Society to the Royal Institute of British Architects, and that the Council of the Society be hereby authorised to enter into such Agreement with the Council of the Royal Institute of British Architects as they shall deem expedient for the purpose of carrying into effect such Amalgamation."

It was further resolved:

'That The Society of Architects, founded 1884, be wound up voluntarily under the provisions of the Companies (Consolidation) Act, 1908, and that the Council of the Society be hereby authorised to appoint a Liquidator or Liquidators for the purpose of such winding-up."

The proceedings then terminated.

The Evolution of Form in Silver Plate. By PERCY MACOUOID.

HE subject of Silver Plate is such a very vast one that I propose to-day only to deal with the matter in connection with the growth and development of its form, excluding all that is strictly ecclesiastical and limiting myself to the domestic plate of this country produced during Tudor times and onwards.

The possession of gold and silver plate has always been a mark of wealth and distinction, highly important gifts between persons of distinction or to colleges and municipal guilds invariably comprised plate in some form-hence the spirit of emulation was aroused for the production of the most beautiful and ingenious variety of workmanship, and to fulfil these demands we find records in early times of a very high class of intellect devoting its artistic endeavours to this craft. To design fine plate, as indeed to design anything, it is necessary to be able to draw with skill and accuracy, so we find that in the 15th and 16th centuries many of the greatest painters abroad, were designers of goldsmiths' work. Unfortunately there were but few fine draughtsmen in this country, and this without doubt accounts for the fact that so much of our early English plate owes its origin in form to foreign sources. for we had to go to France, Italy or Germany for designs in the Tudor, Gothic and Renaissance times, and very frequently employed foreign workmen, so that the plate made here during these periods invariably reproduced foreign motives; but later on, as painting and architecture became individual to this country, we clearly see the development of fresh spontaneous impressions and eventually the separation of foreign ideas which is strongly marked by simplicity and solidity. It is useless to attempt to describe examples of English Gothic plate anterior to the middle of the 15th century, for with the exception of a few chalices and spoons no specimens remain that can be conscientiously assigned to this date, but there is no doubt from the Pre-reformation inventories such as these of Winchester College, the City Companies and certain private individuals that the amount of Gothic silver plate made in England must have been very great. In an inventory taken of the Winchester College Plate in 1535, many ounces of secular silver are enumerated. whilst the ecclesiastical plate given to the College Chapel by William of Wykeham and other donors amounted to nearly 4,000 ounces of silver and 92 ounces of gold, which was confiscated in the reign of Edward VI. The well-known King's Lynn Cup may or may not be English but it essentially belongs to a period of art before 1450, and although we may assume that we possessed a school of architecture at that time strongly tinctured with national taste, it is more easy to arrive at a conclusion on this point, for buildings survive the wear and tear of centuries, whereas the precious metals then being so valuable were constantly being melted down for

the purpose of financing some war or personal raid for which ready money was required, in addition to the wish to create new and fashionable shapes to please the ever varying taste of the rich men of those times, and so the examples of genuine Gothic domestic plate are now, alas, few and far between.

It is on the subject of the evolution of form from some of this existing plate that I propose to speak, and I think I can best explain my meaning by selecting as example those objects that are most familiar to us all. There have been three principal kinds of drinking vessels exclusive of horns to which we need not refer. The bowl, developing into the cup, the tanker or tankard, and the beaker. The earliest form of cup was a bowl of metal or wood, generally the latter, and in Mediæval times called a mazer. They were generally formed out of the pollarded and consequently knotty portions of the maple or other trees—and owing to the hard quality of the wood were almost imperishable and capable of a high degree of polish. In the 15th century, these wooden mazers were surrounded—originally no doubt to preserve their edges—by a band of silver gilt an inch or so deep frequently ornamented with a motto, and for strength on the inside a small silver gilt disk called a print, engraved and sometimes enamelled with a sacred emblem. A considerable number of these mazers are in existence, preserved chiefly in the Museums and Colleges. The drinking cup belonging to Oriel College, Oxford, is of the second half of the 15th century and is the earliest form of drinking cup for domestic use. The shape is Oriental and it was probably brought over by the Crusaders. This must have been an extremely awkward vessel to handle and it soon struck someone to improve matters by mounting the bowl on to a stem or foot, making it at once more decorative and convenient for use, as in the case of the well-known specimen in the possession of Caius College, Cambridge, called the Cup or Standing mazer of "the three Kings." The so-called "Anathema Cup" belonging to Pembroke College, Cambridge, which bears the very early hall-mark of 1481, the bowl and stem begin to blend together in a completed design—the bowl becoming bell-shaped and departing from the mazer form. This cup owes its name to the circumstance of the donor, Thomas Langton, a Bishop of Winchester, having had engraved on its base: "Qui Alienaverit, Anathema sit'' (Whoever steals this, let him be accursed). Most effective words, as after 420 years the cup still remains in its original place. Twenty years later, another development took place the cup becoming straightsided, with a flattened base, but the feeling is still apparent of a bowl mounted on a truncated stem. This rare specimen bearing the London hall-mark of 1500 and the Anathema Cup originally possessed a cover, these would have been fairly flat and tapering to a point on which a finial of seal-top shape, probably enamelled with the arms of the owner or sometimes a precious stone supposed to act as an antidote to poison, completed the design of the cup.

The extreme simplicity of the stems in the cups up to this period should be noted. for in another few years elaboration of design in this part of the cup commences. These decorated stems were first introduced from Italy. Lorenzo the Magnificent was an ardent collector of everything beautiful, and some of his most treasured possessions being antique Roman bowls, cut of solid agate, lapis lazuli, or crystal. some artists of the Renaissance conceived the notion of mounting these on stems with handles of gold or silver. The solid mass of the plain stone had to be relieved by a fanciful design in the metal, sometimes enamelled, and even this to render it more fanciful was often further ornamented with pearls, rubies, and other precious stones. The English and German goldsmiths were quick to appreciate the new idea. and having no Roman bowls we find him towards the end of the 15th century mounting ostriches' eggs, cocoanuts, nautilus shells, ivory, or anything else that came handy. The plain cocoanut cup belonging to Oriel College, Oxford, is of the end of the 15th century. Another specimen elaborately carved with scriptural subjects and the mounting stem and cover richly worked in the style of the Renaissance, is dated 1576, and in a third and much later example an ostrich's egg is mounted to form the bowl, the lid being composed of the upper part of the egg, surmounted by a little figure. This cup is of the date 1623, but such a cup as this of so perishable a nature was probably more for ornament than for use. To adapt these same stems and forms to a metal bowl was a very natural step as was reducing the cup to a flat tazza shape, still keeping the baluster stem. These were much the same in character as the raised dishes used for sweetmeats and were a most graceful form of cup. The first is of the date 1570, the second about thirty years later, and the third 1625, this last is smaller in size and slenderer in proportion, and one clearly sees here the strong influence of the Venetian wine glass that was slowly coming into use, for by the end of the 17th century, silver wine cups had ceased to be much in requisition, glasses and beakers having entirely superseded them. Tankards came into existence towards the middle of the 16th century. In all probability they were an outgrowth from the ewer and stone-ware jug. These plain stone-ware or salt-glaze jugs were first made in Germany, and like many other things that have come from that country since, were both cheap and ordinary. They were imported over here in large quantities for quite common use, but a fashion arose for mounting them with silver covers, bases and side straps of highly finished workmanship. That the jugs themselves were considered worthless is evident from a remark in a letter from the Venetian Ambassador, resident at our court at the time, for he says: "The English have a curious habit of mounting quite common pottery with silver in the most elaborate manner and these they are very proud of." The fashion for these mounted stone-ware jugs went on for upwards of fifty years, and they were highly esteemed. The convenience of a hinged cover attached to this form of drinking vessel must have struck the craftsman as a distinct scientific advance, and for the

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hot spiced drinks so much in vogue at that time, far more practical than a loose cover. This rounded form of tankards soon became in Elizabethan times straight-sided, slim, and graceful in shape, engraved, or repoussed with fine strapwork intersected with mouldings, frequently having masks or other ornament added in chased work.

About the date 1640 all ornament is suddenly dropped and the tankard becomes plain still maintaining a narrow shape, but with a so-called petticoat shooting out at the bottom introduced, so that the person whilst drinking could grip the tankard with his left hand, the handle ending in a whistle for obvious reasons. This sudden cessation of ornament in plate, save for some light lines of engraving or a coat of arms, had been slowly coming into fashion since 1635, and owed its origin to the simplicity of life affected by the Puritannical faction which culminated under Cromwell into the neglect of all that was beautiful. The tall tankard of 1640 well represents its period, and although of a shape made for ecclesiastical purposes as a flagon was also in domestic use.

A few years before the Restoration and after, the drum of the tankard becomes shorter and wider, as they are reduced in height and the petticoat disappears, but they remain plain except for some pseudo Chinese engraving, slight flat applied ornament, called by some card cutting, or introduction of an acanthus border at the base. There are many large tankards decorated in a similar fashion belonging to the City Companies.

In the 18th century, the lid of the tankard became dome-shaped, and the sides curved. Beakers are best described as tumbler-shaped vessels, originally in Gothic and early Tudor times they were mounted on either a plain base or on feet, in the form of dogs, lions, or human heads, and had covers of pyramidal shape, surmounted with some cognizance or object emblematical of the owner, or a precious stone that served as a talisman.

The word beaker is Scandinavian and derived from the Greek bika, and probably imported into Northern Europe by the Varangian Guards, the shape of the vessel being suggested by the end of a horn which was the recognized drinking vessel of the Dane and the Saxon. The beaker was never so popular here as in Germany.

A very beautiful example, is a beaker, belonging to Christ's College, Cambridge, and given by Margaret Beaufort, the mother of Henry VII. It is dated 1507, and is covered with most typical decoration of that period. The beaker is found throughout the 16th century with the sides generally ornamented with engraved strap-work, but at this time, this particular form of drinking vessel was probably not used by the very rich, as its decoration and workmanship ceased to be so well considered or elaborated as in the contemporary wine cup. In Charles II. reign, a smaller kind sprang into existence. These had slightly outcurved edges and were plain except for bands of engraved or repoussé ornament, and were used till the end of William

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and Mary's reign. They were evidently a cheap form of gift, corresponding I presume to the two guinea wedding present of to-day, as they are almost always found with initial prick-mark letters of donor and recipient, together with the date. Small English beakers of this class are very rare now, for being insignificant as decoration they were melted down when superseded by glass. Some have survived by being given or left to the Church for use as Communion Cups, and these have in many instances been parted with again as not suitable for the purpose.

The large Standing Cups or hanaps as they were called were intended for decorative purposes, and were only used at ceremonial banquets as is the case to-day. These embodied in their form and decoration all that I have already described as pertaining to the wine cup, and being on a so much larger scale, the changes of form and ornamentation are easily traceable. The earliest known English hall-marked hanap is the Leigh Cup of quite the end of the 15th century. These important cups were made throughout the 16th as more or less English reproductions of a mixed German and Italian style inspired by the School of Cellini, generally with a human figure on the lid or cover. The so-called Leigh Cup, in the possession of the Mercer's Company, dated with the London hall-mark of 1499, is a very characteristic Tudor-Gothic specimen, and the elaboration of detail in the workmanship is most remarkable. It stands about 16 inches high, while the cup belonging to Corpus Christi, Cambridge, is 21 inches high, this is dated 1570, and is in the richest style of the English Renaissance, with the strong foreign influence, very evident. At the commencement of the following century, the end of the stem where it joins the bowl is often opened out into three little ornamental brackets, and a perforated spire again supported by three little brackets, added to the cover. These are generally spoken of as Steeple Cups, and bare the last example of Renaissance influence in English plate. The proportions of a Steeple Cup are comparatively poor to those prevously referred to, and suggest that the silversmith rapidly coming to an end of his resources took refuge in building up unconnected form. Apparently the public of that time were also of that opinion, for towards the end of Charles I. reign, the fashion for Standing Cups was in the semblance of a large plain tea-cup on a baluster stem devoid of decoration except for engraving, or sometimes just a granulated surface.

Probably at this time, the dearth of anything new in design was caused by the small demand for more important pieces, all spare money being required for the King's Army, or the opposing Parliamentary Forces. Whilst many historical collections of old plate were melted down by loyal subjects for the King's cause, and every form of Art languished as is invariably the case under socialistic tendencies with the reign of Charles II., all fresh design in the form of the Standing Cup died out, and when it reappeared it was as an evolution of the porringer.

Porringers and Caudle Cups are practically the same class of vessel. They were introduced midway through the 17th century for the possets and hot drinks that were

so much indulged in then. The earliest are rather gourd-shaped, narrowing at the neck, and have a cover and dish on which they were carried, and always have handles. The bowls and covers are ornamented with the form of decoration prevalent at the moment, and those of Charles II. reign are generally found bossed out with large fat flowers and fruit, later again with classical design in the form of acanthus or spiral gadrooning. This latter pattern goes on into the following century. The handles were originally ornamented with a recumbent female torso in the Rennaissance taste. In fact, the bulbous form of the porringer does not lend itself to beautiful decoration, and it is evident that the artist having ceased to design, the silversmith had taken the fashioning entirely into his own hands, and was turning them out by scores. With the exception of pseudo Chinese engraving, all porringers seem to be decorated in a variation of one of these three grades of style. The evolution of form in their handles is most interesting to note. There is still some attempt at grace of modelling in the figures, but in the constant repetition by the craftman without any fresh design, these develop into lumps, then beads, and finally, into two protuberances to rest the thumb on. Another curious detail like this is the whistle at the end of a tankard handle, originally in Jacobean times, constructed as a real whistle with a view to ordering yet another drink, it deteriorated through reproduction, like the third eye of the Antediluvian Saurian, till it became a useless cavity.

By the commencement of the 18th century the handles have become quite plain, and the porringer being no longer in requisition, the next evolution of design was to mount it on to a base, hence the beginning of the two-handled cup, and the shape that for some mysterious reason has ever since been consecrated to the Racing Prize. The base gradually becoming taller, and the bowl narrower, it developed in the reign of George III. into the well-known classical urn-shape bearing the strong "Adams" stamp. It will be evident how very vividly plate bears the imprint of form and decoration of the moment in which it was made and that the decoration of plate reached its zenith in the middle of the 16th century, for there was a realism of thought at that time and a straightforward convincing power of strength, conveyed by the masterly touch of artist and craftsman working in unison, that has never been surpassed. Its detail and design too had then reached to such an art that though concentrated down into a piece but a few inches high, it is so full of detail, so marvellous in proportion, that the same motives could be applied to an object twenty times its size and nothing be lost.

When the influence of Cellini and the goldsmith artists of that time began to wear itself out, plate commences its decadence, for the simple reason that the intellectual power is lacking. The Steeple Cup of James I., many of which were designed by George Herriot, the king's goldsmith, prove that the best goldsmith of that time was not comparable with those that had gone before, and in Stuart times though there is much that is exceedingly beautiful, the lack of artistic feeling becomes more still

evident, and the elements of quantity not quality begin to supplant all individual interest. A very favorite form of decoration at the time of the Restoration, and which kept in favor for 30 years, was large shapeless bossed-out flowers and fruit, amongst which doubtless in an ecstasy of newly discovered loyalty, a fat lion and unicorn gambol, and one turns with relief to the severer taste introduced during the reign of William III. This, as well as the plate of Anne and George I., is dependent for beauty only on its proportions and mouldings. What greatly set off the proportions in the silver of this period was the extreme beauty of surface, this is caused first by the actual quality of the metal, which was of Britannia standard between 1696 and 1720, and by the numberless hammer-markings which produced an irregularity on the plain surface, distributing the effect of light softly over the curves. In the plate of George II. and III., the hammer marks are visible on the interior, but generally a polish was put on the outside by the workman before parting with the piece, and in consequence, plate of that period much resembles the smooth manufactured efforts of to-day, on which the high brilliancy of the silver is concentrated into a diamond-like spot, by the combined efforts of butler and footman. In old plate the charm of surface is no doubt added to by the infinite amount of little points and imperceptible scratches consequent on wear, that reflect the light and give a curious whiteness to the metal; it is a minor detail, but it is also a minor attraction that the modern manufacture cannot give. Many collectors prefer to keep their specimens with the surface oxidized and uncleaned, but, I doubt, whether in this way they do not lose much beauty of undulation of surface, especially in the instance of only slightly decorated articles.

Metal work is intended to look like the metal it is chosen to represent, and in all ages its exterior form has been considered with a view to brilliance. To obviate much cleaning in the highly decorated pieces, these were generally gilt, but in early times, you will find the plainer portions left in the silver, and this is called parcel gilding. There is a praiseworthy attempt in these days, to revive the hammered surface, but at present, the effort to obtain the result is too apparent. The art of using a tool sufficiently large to give the infinite variety is no longer understood, and the results therefore are purely methodical and mechanical.

I now pass to the evolution of form in the very familiar and necessary objects, spoons and forks, the former of which indicate the varieties of change very clearly. No exact age can be assigned to the spoon, but the earliest records we have, would seem to be Egyptian, about 2,000 B.C. The rudimentary idea of a spoon is supposed generally to have originated from a shell, indeed, its Latin name *Coclearius* more or less proves this conclusively to be the case. The first development must have been to mount the shell on to handle of wood, bone or metal, then the whole thing was roughly fashioned out of one of these materials, hence the complete spoon. It is interesting to note how the taste in the matter of shells reverted back, for in

Renaissance times we find rare shells, rock crystal and agate, etc., being constantly used for bowls mounted to elaborate metal handles. The earlier the spoon, the more the bowl approaches to the shape of a plover's egg, the pointed end being near the handle. In the Byzantine, Roman and Gothic spoons the bowl is on a much lower level to the handle-let down as it were by a little step. By the 15th century, this step disappears, but the bowl still remains well below the handle and continues to do so for many years. In Gothic times, the handles were square-sided and the tops terminated with some ornament: an acorn, a diamond-shaped knob, lion's sejant, human heads or whole figures, such as the Apostles, and finally, it became what is known as the seal top, which is simply the handle terminating in a flat base without any ornament, and this flat plain surface being filled in with prick-mark initials. There is also a spoon called a slip-top which originated in the middle of the 16th century from having (according to the ultra rigorous ideas of the then new Protestant religion), had the Apostle removed together with the base on which it stood, leaving just the stem, others were then made to match these and so a fashion was created that existed for a time. For about a hundred years from the middle of the 16th century, the seal top form of spoon was more generally prevalent than any other, isolated examples are even found as late as 1679, but these are rare. The original shape of the seal was hexagonal, and the necking or little moulding supporting it similar in character. Early in Elizabeth's reign, this seal becomes rounder and the plain necking developes into a little flattened ball divided into sections, something like a microscopic canteloupe melon. Towards the end of the century, this ball is exchanged for a little vase or baluster-like shape with low acanthus relief, the seal top still remaining round. This continues through the reign of James I., and then the ball under the seal is once more introduced on the top of a rather longer baluster. This chronological evolution is a very certain way of dating unmarked spoons, for the changes though subtle, are easily perceptible to a close observer.

The heads of all these spoons, be they Apostles, lions, or seal tops, were invariably cast and were dovetailed into the stem with a little tongue, the bowls and stems being always of hammered metal, these really vary very little, but as the spoon progresses through the 16th century, the bowl becomes less like the oval of a plover's, and more like the oval of a hen's egg, till finally, it resembles the outline of a duck's egg. I can think of no better simile than this familiar object, and most probably it was from the egg that all ovals originated their infinite variety. In lion top spoons the animal is sejant, and no doubt a representation of the British Lion of the period. The figures of the Apostles are generally crude and stumpy, bearing a strong family resemblance to each other.

Isolated specimens bearing the child's patron saint, were frequently presented as Christening gifts. A complete set, however, of thirteen with what is called the Master spoon, is extremely rare. That spoons of all kinds were thought a great deal

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of and were a much treasured form of plate is evident from the way they are mentioned in wills and other documents, even as far back as the 13th century. The form of the spoon obviously does not lend itself to much variety and treatment of decoration, and when every idea in the way of terminal finish had been exhausted, a novelty from France introduced by Charles II. with the Restoration was welcomed. This marks a most sudden and distinct change in the whole form of the spoon, the bowl became a perfect oval, with the handle quite flat, the top of which broadened out and was cleft with three divisions into a rude resemblance of a hind's foot, hence called "pied de biche," or sometimes "fish tail." The bowls of these Charles II. spoons is quite on a level with the stem, and is strengthened at its juncture by a pointed prolongation of the stem into the back of the bowl, termed a rat-tail. Originally this rat-tail was contrived merely for strength, there had existed abroad in earlier times, a combined fork and spoon in which the prongs of the fork folded over the back of a moveable bowl fitting into little sockets, and this, no doubt, suggested this addition.

Originally this tail was decorated, the rest of the spoon remaining plain, though a few specimens are found after 1776, with an engraved or die-stamped pattern on the back of the bowl and front of handle. These flat spoons continued with variations into Anne's reign, and the clefts at the top of the handle being gradually omitted, and the bowl by degrees becoming deeper, it took the form we are accustomed to eat with to-day.

About 1710, the handle of the spoon was bent forward and was more rounded. with a strong rib running down the face of it—this rib is a very characteristic feature for twenty years or more. Eventually, the rat-tail becomes shorter and squarer, and finally degenerates into the hideous excresence with meaningless little shoulders that we find on modern spoons, and as the rat-tail disappears so the handle commences to curve backwards. I have refrained from touching upon what I will call fancy spoons, such as ladles, mulberry or tea spoons, etc., as they do not indicate the changes so clearly, but I would like to say just a few words about forks. These were originally two-pronged, and existed as early as the 14th century, mention of them being found in inventories of that time, but whether these were English or all imported from abroad, it is impossible to decide. However, at that early period it is certain that they were not used in conjunction with the knife for meat, but merely for sweetmeats and fruit. In the earliest examples the prongs are of steel and the handles of silver, ivory, amber, enamel, or some such substance. The fork as an adjunct to the knife at table, was first used in Italy, but came to us from France. There is a set of silver forks existing in Cornwall, belonging to Lord Mount Edgecombe, dated 1667, which are the earliest set of English forks known, they are three-pronged and flat-handled like spoons of the same period. Although, three-pronged silver forks were at first most general, isolated examples of four prongs are also found of

that same date, and occasionally instances of two prongs; these two pronged silver forks may seem extremely inconvenient to our modern ideas, but it must be remembered that our ancestors ate their vegetables and small food from the back of their knives.

The fork followed precisely the same evolution as the spoon, the flat handle giving way to the round with a smaller rib down the front, this rib in course of time disappeared, and the fourth prong, which had been omitted for over 100 years was re-introduced as a permancy, for the modern three-prong forks we so often see now are merely copies of those of the 18th century.

Of forks and their variety there is little to say, fingers were made before forks, and played so important a part at a meal that we can quite understand the practical necessity of the Rose-water dish. At the time when art interested herself most in plate, forks were virtually non-existant, and so but little care and thought have been expended on them.

I have this evening been able to touch most lightly on my subject, and for want of time have mentioned but a very few of the leading forms of plate, out of many hundreds of existing examples. I have endeavoured to select only the clearest types of their period without regard to any individual merit, so as to put before you some idea of the gradual growth of form and decoration. Isolated specimens and even a reverting back to a previous fashion in no way affect the onward movement.

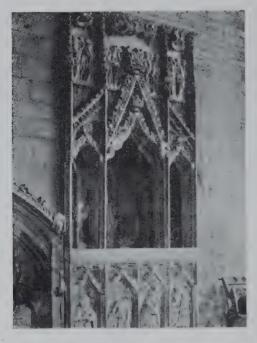
This onward movement was also a downward one, for we have with us now more or less successful flying machines, such scientific concentration of food that you can almost feed an army on one pill, but the art of making beautiful silver plate with many of its sister arts has departed from among us, and we may well cherish as we do in Museums, Colleges, City Companies and private collections, the few genuine specimens of English Gothic and Renaissance plate that have survived, for it is the plate of this period that has never been surpassed in either dignity, design or decoration. Jacobean, Stuart and Georgian plate, graceful and beautiful as it is, such as the work of the Vyners and Paul Lamerie, was only evolved out of what had gone before.

Hawton and its Easter Sepulchre.

The village of Hawton lies about two miles to the south of Newark. It possesses nothing of exceptional interest save the Parish Church of All Saints', the nave of which is Early English, the chancel Decorated, and the tower Perpendicular. The latter was built by Sir Thomas Molyneux in 1491, his arms, the cross molines, being much in evidence. The western door of the tower which is of great beauty bears the inscription. "Jesu Mercy, Lady Helpe." The chief glory of the church is, however, the beautiful chancel, built by Sir Robert de Compton in 1330, his remains resting in the canopied recess on the north side. This recess still retains a hagioscope communicating with an anchorite's cell which formerly stood outside the chancel on that side, evidences of which are visible on the exterior of the church. The arch which surmounts the Compton tomb has very deep and rich mouldings, hanging tracery, and a richly crocketed ogee canopy with a bracket in the finial for a statue. Adjoining this tomb is the far-famed Easter Sepulchre, probably the finest example in the country, although that at Heckington closely resembles it in many respects The sepulchre is divided into three compartments, the central one containing a figure of the Saviour with Mary Magdalene kneeling before Him. In the western compartment is a richly canopied niche for the reception of the Blessed Sacrament, with a figure of a kneeling angel close by. In the eastern compartment are the figures of two women. These three compartments are elaborately canopied, the carving and diaper work being of the finest description. The upper portion of the Sepulchre represents the Ascension, the disciples gazing heavenwards as Christ passes into the cloud, only the lower portion of the Saviour's garment being seen in the carving. At the base of the Sepulchre, in four niches, are figures of the Roman soldiers, two of whom are represented as being asleep, the other two, although much mutilated, bear evidences that the sculptor intended that they should be seen to be awake. It is to be regretted that this Easter Sepulchre has been so ruthlessly mutilated, but I believe there is a restored facsimile in the Mediæval Court at the Crystal Palace.

It may be interesting to set forth here the ceremonial connected with these Easter Sepulchres:

"Uppon Good Friday theire was marvelous solemne service, in the which, after the Passion was sung, two of the eldest monkes did take a goodly large Crucifix bringing it betwixt them to the lowest steppes in the Quire, and then one of the said monkes did rise and went a pretty way from it with his shoes put off, and verye reverently did creepe uppon his knees unto the said crosse and most reverently did kisse it. And after him all the other monkes, in the meantime all the whole quire singinge an himne. The service beinge ended, the two monkes did carrye it to the Sepulchre which was sett up in the morninge on the north side of the Quire nigh to the High Altar, and there did lay it, with another picture [i.e. statue] of our Saviour Christ in whose breast they did enclose the blessed Sacrament of the Altar, sencinge it and prayinge into it upon theire knees.



EASTER SEPULCHRE.



One of the Roman Soldiers (asleep) at the base of the Easter Sepulchre.



NICHE IN EASTER SEPULCHRE IN WHICH THE BLESSED SACRAMENT WAS PLACED.



THE SEDILIA.

Photos. by Henry Walker.

"There was verye solemne service uppon Easter Day between three and four of the clocke in the morninge, where two of the oldest monkes came to the Sepulchre and did sence it sittings on their knees. Then they both rising came to the Sepulchre out of which they tooke a marvelous beautifull Image of our Saviour representing the resurrection, in the breast whereof was enclosed in bright christall the holy Sacrament, through the which christall the Blessed Host was conspicuous to the behoulders. Then after the elevation of the said picture, singinge the anthem Christus resurgeus, they brought it to the High Altar. The which anthem beinge ended the two monkes tooke up the picture from the Altar, proceeding in procession to the South Quire dore, where there were four antient Gentlemen belonginge to the Prior holdinge upp a most rich Cannopye of purple velvett, to beare it over the image carried by two monkes round about the church, the whole quire waitinge uppon it with goodly torches and great store of other lights, all singinge, rejoycinge, and praising God, till they came to the High Altar againe, whereon they did place the image, there to remaine untill the Ascension Day." *

In these days of elaborate ritual and costly decoration of the altar, it comes somewhat as a welcome surprise to find that a plain oak table is found sufficient at Hawton. On the south side of the chancel the piscina and sedilia claim our attention. They are similar in style and ornamentation to the work already referred to, and are worthy of the closest study. The elaborately carved canopies bear a representation of the crowning of six bishops and martyrs. It is impossible to examine the exquisite carved work in the chancel at Hawton without a feeling of wonderment as to how such work found its way into a sequestered church such as this. The explanation probably is that Hawton is within a few miles of Southwell, and there is every reason to believe that the same hands that carved the beautiful Chapter House in the Minster there, were also responsible for the work at Hawton.

There is only one other feature in this church that we can find space for. In the south aisle there is a piscina, exceedingly plain in character, but it possesses an unusual feature in the shape of a small niche in the eastern wall of the piscina. This niche is, roughly, about two inches deep, with a height of six or seven inches. What it was intended for seems to be an insoluble problem, and if any of our readers can throw light upon the subject, we shall be glad if they will do so.

HENRY WALKER, Stamford.

The Building Stones of Ireland.

Mr. Anthony Scott, M.S.A., in the course of a paper read before the Scientific and Engineering Society of Ireland says, the oldest stones known to have been handled or used by man in this country are those to be found in stone circles, such as Lough Mask in Mayo, and around the base of the mound at Dowth, Co. Meath, also the stone chambers and passages under that great moat and the still greater moat of New Grange within about half a mile or so distant from Dowth. Both of these ancient monuments have been taken over by the Irish Board of Works to be preserved as national monuments.

These two monuments of a pre-historic past are of great antiquarian interest. They are the finest of the kind to be found in Ireland, but beyond a passing notice of the stone, rough and carved, used in the construction of the walls and roofs of passages and chambers, they are outside the scope of this paper.

There is a third great mound close to the two referred to, known as Knowth, but this has not, so far as I know, been vested as yet in the Board of Works for examination or preservation, although I should be very glad to see it opened and examined by that eminent antiquary, Dr. Cochrane. The stone used in the construction of those chambers, when exposed to the weather, does not crumble or decay, as I have known it to do in similar but less important mounds in the Lough Crew hills in the same county.

The next class of ancient buildings in point of antiquity are the Druids' altars, cromlechs, stone-built cashels, and bee-hive cells, as at Gallerus in Co. Kerry, the Blasquet Islands off the coast of Kerry, and the great Dun Angus on the principal island of the Arran group in Galway Bay, and it is here that the action of the weather can be seen and noted to perfection, for there are few seaboards more exposed to the full force and blast of the westerly winds, over 2,500 miles of ocean, and yet you have the stones handled, as in Egypt, by pre-historic man, still weathering the ravages of time, storm, and salt-sea spray.

Then we have the pillar stones as well as the roughly carved ogham stones, wrought out of various qualities of rock, but principally of granite, limestone and sandstone, or sandstone grit.

The next most ancient buildings which we have in this country are the round towers and the early Christian churches.

The author of *The Arian Origin of the Gaelic Race and Language*, says at page 376, "It appears to the writer that the stones of all the round towers have been taken from two or three quarries, just as in Egypt the stones which went to the erection of the Pyramids have been all dug from the same quarries in the Libian mountains west of the Nile." He further states, that "the style of stone made use of in the

The Building Stones of Ireland.

pillar towers is found suited to the Irish climate, and is in the opinion of scientists admirably calculated to withstand the action of the weather."

The opinion expressed by the learned writer as to the stones of which the round towers have been constructed having been taken from one or two quarries is quite a reckless statement, as well as contrary to actual fact.

The towers have in every instance been constructed with the stones found in the immediate neighbourhood of such structures.

In Glendalough, Co. Wicklow, the stone used is the greenish mica slate, which is the general geological formation of the hills, and mountains on either side of the valley, mixed with granite boulders, which are to be found scattered over these hills and valleys in every direction, and said by geologists to have been carried there by icebergs during the glacier period.

The towers of Admore in the Co. Waterford, and Clonmacnoise on the Shannon, are wholly composed of sandstone found in the district.

In Kilmacduagh in the Co. Galway the tower is built with local blue limestone of the immediate district.

On Devenish Island in Lough Derg, Co. Fermanagh, the tower is built of sandstone grit found in boulders along the lake shore, while the interior is lined with dark blue limestone, which does not stand the weather so well.

And so in every district in Ireland the same thing occurs; the towers are built with stones found in the district.

So much for the old stones used in the first stone buildings ever erected by the hands of man in this country, and yet they are there after having weathered storms through the long centuries.

I may now be permitted to examine some of the present-day stone quarries of Ireland and what they produce.

Granite rock of great variety, colour, texture and density is to be found in most counties in Ireland. But for variety in composition and the colour of its granitic rocks, Galway holds pre-eminently foremost place, and in describing its composition and variety of shade and colour I cannot do better than quote from an article written by Dr. R. Cochrane many years ago. In speaking of its granite rocks, he says, they "vary from fine and nearly compact to largely phorphyritic, and being of many colours, white, and green, shades of red, greenish, yellowish, blackish, etc., some being mottled and others clouded; while associated with these are variously coloured elvans, porphyries and felstones."

"As has just been mentioned, Galway quarries, the granites, elvans and porphyries are greatly varied in texture, colour and beauty."

Shantallagh, Barna, and Ballagh are the principal quarries now worked, but several other quarries have been opened in the district, *i.e.*, in the immediate neighbourhood of Galway; for instance, St. Helen's, Taylor's Hill, which produces a

fine-grained, red, clouded with yellow maculated with black and a little white, polishes well and can be got in blocks say 5 to 7 ft. long, is a very serviceable stone. Spiddal, a very fine grey granite. Shantallagh is a fine-grained red, maculated white with a little black, polishes well and can be got out in good large sizes and scantlings. Barna is similar, but more grey, speckled with red. Ballagh, near Bushey Park, porphyritic red and greenish, yellow with large flesh-coloured crystals; polishes well and can be raised in long and very large blocks. A handsome stone and in much demand, and extensively used in church work. Letternagh is a quarry north of Rahoon House; is lighter in colour than Ballagh stone, and coarser in grain than St. Helen's and Shantallagh, clouded and mottled, greenish-purplish with large bright red isolated crystals and quartz.

There is an endless variety of granite in the Galway district, if it could only be properly worked and the quarries developed. Up to the present the stone raised may be said to be practically surface stone, as none of the quarries have been sunk to any great depth, where denser and better stone might reasonably be expected.

One thing in particular struck me in connection with this variety of colour, which I never observed in either Aberdeen or any foreign granites, and that is the clusters or groups of colours similar to small bouquets of flowers made up of various coloured flowers. Aberdeen and foreign granites seem to be more regular in granulation with much less clustering of colours.

Having such an immense variety of the best building stone in Ireland in Co. Galway, consisting of many coloured granites, including beautiful grey granites, limestone, blue and white as well as the very best description of marbles—black from the Royal quarries of Merlin Park; white, green and other various coloured marbles in the Connemara region—I could never understand why the late Mr. Mitchell Henry, who built Kylemore Castle, should have imported granite all the way from Bullock and Dalkey for the erection of Kylemore Castle; importing coals to Newcastle is not in it with this transaction.

Sixty per cent. of the Dublin granite is not considered a good stone for cut stone purposes. It is a coarse open-grained stone and very uneven in its weathering, as may be seen where it has been exposed to the action of the weather for fifty years or over, and particularly where it is used in street flagging. Glencullen stone, taken from a proper quarry, is, however, a most excellent stone and of good colour.

One need only observe the cheap, coarse, discoloured, weather-eaten, honey-combed granite in the window sills, etc., of some of the old Dublin houses, to see how injurious the use of this cheap stuff is to the granite trade of Dublin.

In the Killiney, Bullock, Dalkey and Kingstown quarries the granites are harder and more durable, but those of Wicklow, Ballynocken, and Carlow tool more freely, and are better adapted to mouldings, etc.

The Building Stones of Ireland.

Various lighthouses built around the coast by the Ballast Board, such as that at the south entrance to Berehaven, Co. Cork, as well as public and private buildings in the neighbourhood of the quarries and elsewhere, have been built with granite from Bullock and Dalkey.

The stone used in the construction of the piers, jetties, and harbour works at Kingstown, also the railway offices and buildings in Kingstown and elsewhere along the line, are carried out with stone raised from two quarries now filled up near the land end of the east pier.

The newer works at Kingstown and Dublin stations are of Ballynocken stone.

The Kingstown Town Hall was built with granite quarried at Glenageary railway station. It is a handsome stone, which works easily and well, but the quarry was closed when the work of the Town Hall had been completed.

In bridges, harbour, and quay works, Dublin, Killiney, and Bullock granite was used extensively; also Penrhyn, Dalbeattie, and Newry granites—all good stones when properly selected.

In buildings of importance Ballyknocken granite seems to have had a preference in the past, and so it continues down to our own day.

There are excellent grey granite quarries at Bessbrook, Newry, and Castlewellan, Co. Down, solid, sound, and compact, of fine close-grained texture, which take a high polish.

The facings for the new Catholic Church of Castletown Berehaven, now approaching completion (of which Mr. R. M. Butler, of this city, is the architect), have been supplied from the granite quarries at Castlewellan, and shipped round the coast, the cost being considerably below that of Cork limestone.

The granite of this district is well suited to monumental and architectural work, but it is rather costly to work on account of its extreme hardness. It is generally wrought differently to the Leinster granites, being principally axed instead of worked with the hammer and chiselled as the Leinster granite is.

Granites are to be found more or less in every county in Ireland, and where the geological formation is of limestone, sandstone, green clay slate, or whinstone, granite boulders are frequently to be met with on hillside and valleys.

Limestone comes next to granite in importance as a building stone in this country. There are various grades of limestone, and it is to be had in most parts of Ireland, of one quality or another; the better and more compact qualities are admirably suited to architectural and monumental work.

It lends itself well to architectural and monumental treatment, ornamental work such as windows, tracery, strings, dressings, and carved work.

I have seen, even in very ancient work, some very delicate carvings, as the Seven Churches, Kilmacduagh, Co. Galway, where the stones of the foliage of the capital were not only of high relief but stood entirely clear of the body of the capital.

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The latter quality of limestone, when neatly wrought, is a very pretty stone, either chiselled or rubbed.

Milverton stone is very well known to Dublin architects, and extensively used in Dublin. Stones can be got out in large blocks and scantlings, and they have the advantage of transport by rail and sea.

Sheephouse Quarries, near Drogheda, are very fine old limestone quarries. Stone can be got out here in fairly large sizes. The stone weathers well and retains its colour for a long time.

White Quarry, Ardbraccan, Navan, produces a very fine and very white limestone, well known and used in many parts of Ireland, but very much so in Dublin and Belfast. This stone works more freely than almost any other limestone in Ireland.

Stone from the Ross Quarries, near Mountnugent, Co. Cavan, is extensively used all over the country in church and monumental work. The stone weathers, well and can be got out in very large scantlings.

Sandstone of good quality, both grey and red, is to be had in many districts in Ireland, in varying tints of grey, red, brown and yellow and intermediate shades.

Many of the old sandstone quarries in particular have fallen into disuse, the superior lasting properties of the granite and limestone rendering them more popular, the increased facilities of transport in modern times also tending towards the same result.

As for the marbles already referred to, we have a very fine variety, in Connemara coloured, and a fairly good white, not, of course, so purely white as the Italian marbles; but the coloured marbles are very rich and varied, and take a high polish. Then we have the beautiful black marble of Merlin Park, Galway, which takes a brilliant polish and a beautiful black fossil marble in Kilkenny, well known throughout Ireland.

If we only try to develop such resources as we have at hand, and try to utilize such materials as the country is capable of producing, we shall have very little need of importing building materials at all events.

Some Notes on English Oak.

Comparatively few people, perhaps, during the last half century have used (especially for the higher class of ecclesiastical work) more dry English oak than has Mr. Harvey Hems, and none, may be, know better than he that supplies of this particular material, however large the demand may be, are always available, if those who need it are aware where to procure it. But everyone does not! There is no more enthusiastic an advocate for its use than I am, says Mr. Hems in the British Architect, but when it is stated in Mr. Duchesne's able paper "there is no oak in the world equal to English oak," this is an observation that requires a certain amount of qualification. For hardness and durability it is second to none, but for certain purposes, especially for delicate interior work, there can be no gainsaying the fact that several varieties of foreign oak exist which, being, as a rule, cleaner and freer from knots, are more suitable for these purposes than are the major portions grown in this country.

The lasting powers of oak are marvellous, In my own collection I have (presented to me soon after its discovery in 1907, by Montagu Sharpe, Esq., of Hanwell, Middlesex), an oak stake found in the bed of the Thames at Brentford. It formed part of the ancient British palisades, placed there by our early forefathers for the purpose of defending the great ford at that spot. This, Julius Cæsar afterwards forced in his historic engagement with Cassivellaunus during his march to capture Verulam, B.C. 54. That fight took place 1,965 years ago, yet the oak in question is now as sound as it was upon the far distant day when it was first driven by half-naked woad-painted Britons into the mud of the stream. The wood is as black as is the material generally known as "bog-oak." In my apprenticeship days I worked upon much of the latter, for logs of it were then frequently found, not only in the swamps of Ireland, but also in those near Peterborough, as well as in other places in this country. But, it is now comparatively rare. Much of the so-called bog-oak, of which quantities are made into knick-nacks and other ornaments, sold in Dublin and other centres as such, are no more oak than I am! Nine times out of ten, and oftener, upon examination these things will be found to be simply ebonized sycamore (Acer pseudo platanus).

The most interesting, because the largest and oldest collection of oak carvings existing in this country are the half hundred miserere seats embodied in the stalls of Exeter Cathedral.

The throne made in Bishop Stapeldon's days (1308-1326) is of oak, cut down, the Fabric Rolls tell us, in the woods of Newton and Chudleigh, Devon, in A.D. 1312. The timber was kept in racks to season for four years, after which the task of constructing this superb canopied bishop's seat was placed in the hands of a cunning

craftsman named Robert de Galmeton to carry out. There is nothing in the world to equal it for beauty, or to excel it in purity and delicacy of its 14th century foliage. Its extreme height is 52 ft.

It was Bishop Bleure (1224-1244), who, after an absence of five years from his see, in company with the Crusaders in Palestine, upon his return home caused new stalls to be made in English oak, of which the miserere seats in question alone remain in existence. The oak of which these are made is in every instance as sound as a bell, not the slightest evidence of decay is to be found upon any one of them. Amongst the series is the earliest representation in existence (in oak) of an elephant, a quadruped the hocks of whose hind legs the craftsman who chiselled them made the wrong way, i.e., like those of a horse, instead of bending, like those of a Christian! Amongst these seats may be found mermaids displayed in all their bewitching glory, centaurs armed with bows and arrows, Nebuchadnezzar saddled and possessed of hind hoofs and foreclaws, together with a most delightful series of other quaint subjects. Not the least of these, in point of interest, is one representing a helmed Knight seated in a boat drawn through the waves by a swan. It is the oldest known carved rendering of the legend of Lohengrin and the Holy Grail.

It is frequently asserted that old English oak is as hard as iron. No such thing! I very much doubt whether it hardens materially after it has been worked ten or twelve years. Some while ago the Rev. James Henning, the vicar of Cockington (a picturesque village near Torquay), stated in one of the local newspapers that a 15th century beam in his church had defied all the tools his carpenter possessed; every one of them broke in the attempt to manipulate it. Sceptical on the point, I journeyed to the place in question, with the result that I found the oak to be no harder than old oak usually is. "But it snapped off my man's tools one after the other," exclaimed the genial cleric. Precisely so! The average carpenter, accustomed as he is to work upon deal and other soft woods, sharpens his planes and chisels at a long acute angle. For oak the tools must be rubbed at a much quicker one, so as to give the cutting powers of the steel greater strength. In the former case, although the edge is right enough for pine, etc., it is quite unable to withstand the strain put upon it by the harder material, and as a consequence—the tool breaks.

It is a remarkable fact that English oak is comparatively little known in London. According to Kelly's current issue of the *Directory of the Building Trades*, there are, in round figures, something like 500 timber merchants hailing from the metropolis, yet I doubt if amongst that large number a couple of hundred pounds of good, dry English oak could be obtained to-day. Bentley's fine tower at Westminster Cathedral (284 ft. high) is surmounted by a low dome, covered in, I believe, with lead. The framework is of English oak. I happened to see it put together in the body of the nave prior to its being placed *in situ*. The stuff was as wet as muck, and, for that matter, might have just emerged from the river. Water actually oozed out of it as

the carpenters worked thereupon. I remarked this to the foreman in charge, but his explanation, given, I believe, in all sincerity, was: "It's English oak, sir, no one can ever get that dry." If the man had qualified his assertion by adding "not in London," he might possibly have been justified in this statement. As a matter of fact, splendid dry planks and boards may be had at all times in many parts of England; in Gloucestershire, from such firms as Messrs. Henry Workman, Ltd., at Woodchester, for instance; in Hampshire, obtained from the neighbourhood of the New Forest; in Bedfordshire, in Northamptonshire (especially at Peterborough), and in Lincolnshire (at Stamford), dry English oak in almost any quantity can generally be obtained.

But, although that section of us who have been educated up to it, glory in English oak, it is a fact that cannot be ignored that in the eves of outsiders it does not always commend itself. I remember when carrying out work at All Hallows, Southwark, an edifice designed by the late Mr. George Gilbert Scott, F.S.A. (namesake and eldest son of the eminent architect), the first portion of which was built during 1879-1881, we made and placed within its chancel a lofty sedilia. It was, as stipulated, of English oak, some of the best I have ever used in my life; but, to my surprise, it failed to find favour in the eyes of the parson, at that time the Rev. G. W. Berkeley, now vicar of Butleigh, near Glastonbury, who, whilst admitting he liked the design, and that the workmanship was admirable, remarked he was much disappointed in the wood! Now, had it been made of Austrian or Hungarian oak (of which it is computed upwards of 10,000 logs are imported into this country per annum), it is a thousand to one his approval would have been complete. The fact is, wood of the latter description is almost universally wide and free from knots, and although, as a rule, it lacks altogether the beautiful "clash" we get in English wainscot, it makes, to use a shop expression, "a cleaner job."

Another weakness in English oak is its tendency to "open." It is rare that a lych gate, for instance, is made of English oak, without complaints coming to hand a season or two later that the main timbers show signs of "shakes."



Sutton Trust Model Dwellings, Elevation to City Road. Architect, E. C. P. Monson, F.R.I.B.A., M.S.A.

Sutton Trust Model Dwellings.

These dwellings which were visited by Members of the Society on March 25th, were erected at the junction of City Road and Old Street, E.C., in the Parish of Shoreditch, by the Trustees of the Estate of the late W. R. Sutton, Esq., upon a site one-and-three-quarter acres in extent. They comprise nine blocks, each differing slightly in internal details from the other, and are five stories high, the top one being partly merged in the roof, which is of the Mansard type. The architect was Mr. E. C. P. Monson, F.R.I.B.A., F.S.I.

Each tenement, whether of one or more rooms, has in addition a scullery-bathroom, fitted with hot and cold water and a porcelain enamel cast-iron bath, attached to a Cornes Model Cottager Combination Kitchener, which is fitted between the kitchen and scullery or bathroom, and economizes space, coal and labour. The copper is heated by the kitchen fire, and gives a supply of hot water. The heat from the kitchen fire passes round the radiating front and back of the copper, and the boiler is accessible from the scullery or bathroom. Hot water, which is on the low pressure system, can be drawn in the scullery for bathing or other purposes; and one of the salient features of the apparatus is that there is no risk of explosion, inasmuch as there is nothing sealed, and the whole fitting can be manipulated with ease and safety. The range has a lifting fire with a specially constructed firebox with a view to economy of fuel.

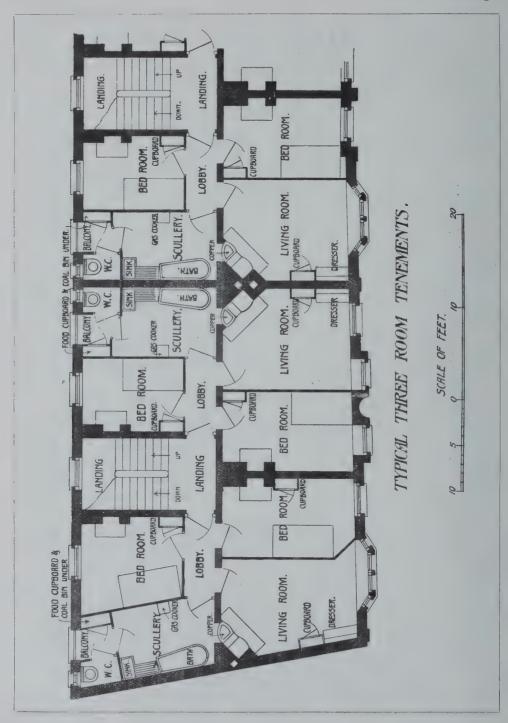
A separate and well-ventilated food cupboard is provided to every tenement, also a coal store and w.c., the latter (as will be seen by a reference to the plans), having access from a balcony. Considerable difficulty was encountered with the foundations, it being found necessary to raft over the whole area of the buildings with concrete, reinforced with heavy expanded metal, and at every floor level the brickwork is tied together by four course cement bands with Messrs. Johnson & Co.'s wire netting reinforcements, three courses deep and one in width for every half brick in thickness of wall.

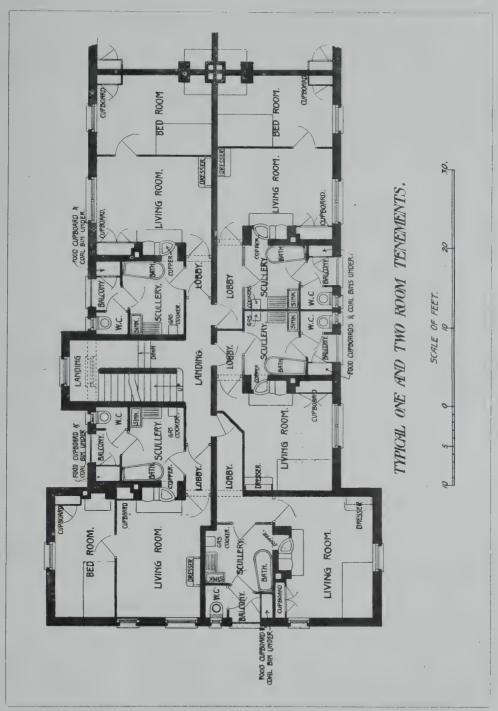
The staircases, landings, and corridors are of glazed brick from floor to ceiling, four courses of brown glazed brick forming skirting, with ivory-coloured brick above. All the rooms are plastered and finished with "Serapite."

The floors are fire-resisting throughout, formed of cement, concrete and steel, the floor-boards are nailed directly upon the concrete, while those of the corridors, w.c.'s, staircases and landings are finished in Portland cement and granite chippings.

The roofs are covered with horizontal and vertical slate battens and green slates upon specially made "Mack" roof slabs, which, in addition to being fire-resisting, are constructed of insulated material, thereby rendering the rooms formed in the Mansard roof cool in summer and warm in winter.

All the partitions are constructed of fire-proof material 2 ins. in thickness, known as "Mack" partitions.





Especial care has been exercised in the planning and execution of all the sanitary features both in the portions underground and the plumbers' work throughout the building.

The lighting is by gas, every tenement being provided also with a gas stove and slot meter.

A sanitary dust pail, similar to those used by the London County Council, is alloted to each tenement.

In addition there are ten lock-up shops and basements of varying size facing on the City Road and Old Street frontages; a range of perambulator and barrow sheds conveniently abut upon the site, and the Trustees' Offices are also embodied as part of the scheme.

The external elevations to the principal streets are of pleasing and artistic character, built of red Leicestershire pressed bricks, and the dressings are of white glazed terra-cotta. All other facings are of picked stocks with red brick bands and red glazed terra-cotta dressings.

The spaces between the buildings are paved with tar paving, and small railed-in gardens and grass plots are provided to add a touch of Nature to the usually very material world around the particular neighbourhood.

The whole undertaking has been carried out in harmony with the Testator's wishes, in that, these tenements replete with every comfort and convenience, are occupied by persons of the poorer classes, who will be housed under exceptional conditions.

ACCOMMODATION.

	ACCOMING	DATION.			
One-room Tenements			* *		65
Two-room Tenements		• •	• •		123
Three-room Tenements		• •	4 4		94
Four-room Tenements	• •			** .	2
					284
Number of Rooms				• •	601
Number of Sculleries					284

Accommodation (approx.) for 1,200 persons.

Rents range from 2s. 6d. per week for a One-room Tenement to 10s. for a Four-room Tenement, varying slightly according to size and position.

COST OF SITE AND BUILDINGS.

Cost of Site				about	£90,000
Cost of Buildings	••	• •		27	70,000
		Total	Cost	,,	£160,000

The illustrations are from blocks kindly lent by courtesy of *The Modern Building Record*.

The Copyright Bill and Architecture.

Mr. Herbert Shepherd, A.R.I.B.A., in a letter published in the *R.I.B.A. Journal*, points out that as the result of prompt co-operation of members, Allied Societies, and The Society of Architects, replies were received from the following Members of Parliament in answer to the question whether they would favourably consider and support a Bill to give effect to the recommendations of the Law of Copyright Committee 1909, more particularly as applied to architecture.

The following Members of the present House of Commons said they would support a Copyright Bill to include architecture:—

Bruce, W., Glamorgan, South; Burgoyne, Alan H., Kensington, North; Cave, G., K.C., Kingston; Clyde, J. A., K.C., Edinburgh, West; Gore, Hon. W. G. A. Ormsby, Denbigh; Hamersley, A. St. G., K.C., Woodstock; Hardie, J. Keir, Merthyr Tydfil; Knight, Capt. E. A., Kidderminster; Lyttelton, Hon. J. C., Droitwich, Money, L. G. Chiozza, Northants, East; Neild, H., Ealing; Robertson, J. M., Tyneside; Short, E., Newcastle; Strauss, A., Paddington, North; Thomas, A., K.C., Carmarthen, East; Williams, Capt. E. Crawshay, Leicester.

The following Members said they would favourably consider a Bill:

Brassey, H. L. C., Northants, North; Burt, Right Hon. T., Morpeth; Ferguson, Rt. Hon. R. C. Munro, Leith; Gilmour, Major J., Renfrew, East; Hickman, Col. F. E., c.B., D.S.O., Wolverhampton, South; Horne, W. E., Guildford; Macdonald, J. R., Leicester; McLaren, F. W. S., Spalding; Morgan, G. H., Truro; Rice, Hon. W. F., Brighton; Valentia, Viscount, Oxford City; Willoughby, Major the Hon. C. H. O., Stamford.

The following Members said they would consider a Bill :—

Balfour, R., Partick; Barnes, G. N., Glasgow, Blackfriars; Beach, Hon. M. A. Hicks, Tewkesbury; Davies, M. L. Vaughan, Cardiganshire; Harris, H. P., Paddington, South; Haslam, Lewis, Monmouth District; Jones, E. R., Merthyr Tydfil; Roberts, Sir J. H., Bart., Denbighshire, West.

The following Members either spoke on or supported the second reading of the Copyright Bill:—

Agnew, Sir G. W., Bart., Salford, West; Balfour, Right Hon. A. J., City; Birrell, Right Hon. A., K.C., Bristol, North; Buxton, Right Hon. S. C., Poplar; Craik, Sir H., K.C.B., LL.D., Glasgow and Aberdeen Universities; Harcourt, Right Hon. L. V., Rossendale; Lynch, A. A., Clare, West; Simon, Sir J. A., K.C., Walthamstow; Tennant, H. J., Berwickshire.

The following Members opposed the second reading:-

Anson, Sir W. R., Bart., Oxford University; Booth, F. H., Pontefract; Hicks, Joynson, Brentford; Parker, Sir H. G. G., Gravesend; Roberts, G. H., Norwich.

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The Right Hon. Sydney C. Buxton, moving the second reading on the 7th inst., truly remarked that people very often only think of books in talking of copyright, and pointed out that the general basis of the Bill is to define copyright clearly and simply, not only in books, but in painting, engraving, music, sculpture, architectural works of art, dramatic works, and artistic works generally.

Later on he said: "As regards architectural works of art, the Berlin Convention proposed that works of art in architecture should be brought under copyright protection."

Mr. Shepherd suggests that every architect who has taken up this matter should see, or anyway write to, his "Member" and remind him of his promised support to or favourable consideration of the inclusion of "Architecture" in the "Copyright Bill."

Festival of Empire.

On the invitation of the Committee of the Festival of Empire, The Society of Architects visited the Crystal Palace, on April 5th. The members were received by Sir Melville Beachcroft, who presided at the luncheon, and proposed "The Society of Architects," and in doing so referred to the proposals for the fusion of the Society with the R.I.B.A., which he thought was the right course to pursue in view of their object in regard to Registration.

Mr. Percy Tubbs, F.R.I.B.A., V.P.S.A., acknowledged the toast and conveyed the thanks of the Society to the Festival Committee, and to Mr. Herbert Matthews in particular for organizing the visit.

Mr. G. A. T. Middleton, A.R.I.B.A., PAST V.P.S.A., proposed the toast of the Chairman.

A tour was afterwards made of the grounds, when the various buildings—each a replica of the original in far-off dominions—were inspected, everything being well forward towards completion.

Building Trades' Exhibition, Olympia.

A large and representative gathering of architects were included amongst those who accepted Mr. Greville Montgomery's invitation to the opening ceremony on April 22nd.

In the unavoidable absence of Mr. Leonard Stokes, due to indisposition, Mr. Montgomery himself declared the Exhibition open, and his forecast that it would prove the largest and best of its kind was amply fulfilled.

Mr. Montgomery subsequently presided at the luncheon, and received the hearty congratulations of those present, their spokesmen being Mr. Arthur Keen, F.R.I.B.A., and Mr. Ernest George, A.R.A., F.R.I.B.A.

The Exhibition will remain open until May 6th, and doubtless many members have already availed themselves of the opportunity of seeing the exhibits. Those who have not done so will be well advised to repair the omission before it is too late.

Correspondence.

To the Editor of "The Journal of The Society of Architects."

Sir,—Your able contributor, Mr. H. Guicharde Todd, has attributed the low state of architecture largely to apathy among members of the profession. Then he suggests registering these apathists!

Do we not want a revival of true art among ourselves? Do we not want to pay more regard to beauty of line, of form and of colour? I believe much is being done toward advance in this direction. It is more seen in small domestic buildings than in city buildings. The reason is obvious and encouraging. The men who design our business premises and public buildings are men who have built up a good practice by business aptitude. If they have artistic ability in addition it is their great good fortune. The two temperaments seldom go together.

Gradually, however, the men of true artistic feeling will have larger opportunities, and if they can apply their gifts with practical effect and businesslike method, the advancement of our art is certain. Meanwhile, I feel it is the part of the rank and file of the profession to keep this aspect always in view. I think we too readily take and use the developed forms and features of old styles. I, for one, would like to see a greater spirit of independence in design. Let us start with a perfectly open mind toward every problem of design we take up. Let us not put in any line or mass which is without a function. In this way we can develop the powers of self-expression which make architecture a living art. It may be we shall at first feel limited and cramped in our expression, but I feel convinced it is the true way to full freedom, power and facility.

London

Yours faithfully,

April 26th, 1911.

J. Ross Wills.



South African Branch.
The New President.

Mr. G. S. Burt Andrews, the new President, has been a Member of the Society since 1893. He is well known throughout South Africa, where he has been a resident for twenty years. He is the son of the late Mr. G. R. Andrews, who was Borough Engineer of Bournemouth, and later Engineer to the Johannesburg Waterworks. Mr. Andrews was trained first in his father's office and afterwards gained further experience with other practitioners. He has had a large acquaintance with the many varied branches of Municipal Architecture, and has had to deal with Fire Stations, Abattoirs, Parks, Baths, Markets, and Dwellings. He has been Town Engineer of the important City of Johannesburg for seven years, during which time some millions have been spent by the Council under his supervision. He has always taken an unselfish interest in architectural politics, and was for many years Hon. Secretary of the now defunct South African Association of Engineers and Architects, and later was President of the Transvaal Institute of Architects. He has frequently acted as assessor in competitions. He is a Member of the Institution of Civil Engineers, the Institute of Mechanical Engineers, and the Royal Sanitary Institute. Mr. Andrews possesses great geniality of manner and tact in dealing with others, and these qualities combined with his known high character render him one who will uphold the credit of the Society.

Forthcoming Visits, Etc.

Building Trades' Exhibition, May 3rd.

By kind invitation of Mr. H. G. Montgomery, the Society will pay an official visit to the Building Trades' Exhibition, on Wednesday, May 3rd. The members will attend individually, and after seeing the exhibits will assemble in the Pillar Hall at 5 p.m. for tea. Tickets of admission may be obtained of the Secretary.

Smoking Concert, May 4th.

The Second Smoking Concert will be held at 28, Bedford Square, on Thursday, May 4th, at 8 p.m. An excellent Musical Programme has been arranged, the Drawings submitted for the Travelling Studentship will be on view, and light Refreshments will be provided. The accommodation is limited, but Members or Students desirous of introducing a friend may do so.

Lambeth Palace, May 20th.

By permission of his Grace the Archbishop of Canterbury, members of the Society will have an opportunity of visiting Lambeth Palace, on Saturday, May 20th, at 3 p.m. Mr. W. D. Caröe, F.R.I.B.A., the architect to the Ecclesiastical Commissioners, who has a very intimate knowledge of the Palace, has most courteously consented to act as guide. As the number of the party is limited, members desirous of joining must notify the Secretary before May 15th.

Sketching Parties.

The following preliminary arrangements have been made by the Students' Committee, further particulars of which will be announced later.

June 10th. Amersham.
,, 24 ,, Morden College or Franks Hall.
July 8 ,, Stone Church.
,, 22nd. Oxford.

Travelling Studentship Drawings.

The drawings submitted for competition will be on view at the Society's premises from May 4th to 11th, during office hours. Admission can be obtained during the evenings, from 6 to 10 p.m., by any members or students who cannot otherwise avail themselves of the opportunity of seeing the drawings.

Mainly about Members.

We regret to have to record the death of the following members:-

MR. PHILIP MUNRO, of the firm of Messrs, Philip Munro & Son, architects, of Bristol, joined the Society in 1887. He was professionally associated with many large undertakings in the West, including extensive operations in connection with the Wilts and Berks Canal.

MR. Walter Andrew, of Parkstone, Dorset, which took place on March 30th, at the Imperial Hotel, Sligo, at the age of 43. It is just two years ago that Mr. Andrew was elected a member of the Society. Most of his architectural work was of a domestic character and much of it is to be seen on the Wimborne estates. He was well known in County Cricket circles, being at one time Captain of the Hampshire team.

MR. WILLIAM RICHARDSON COURT, engineer and chief superintendent of the Liverpool baths systems, which took place on April 15th at his residence. Broadgreen, at the early age of 50. A native of Cumberland, Mr. Court was articled to Mr. J. C. Hetherington, of Carlisle, and subsequently was appointed architectural assistant in the Public Works Department, Hong Kong, when he designed and carried out public works costing upwards of half a million dollars. In 1892 he was appointed chief superintendent of the Liverpool Corporation Baths. The property of the Liverpool Corporation included in the department of baths and washhouses doubled itself during the period of Mr. Court's administration. It was, however, in the planning and construction of new baths in Liverpool that Mr. Court's abilities were seen to greatest advantage. The new baths in Picton Road, Wavertree, Lister Drive, West Derby, Speke Road, Garston, and Queen's Drive, Walton, were all planned by Mr. Court. He joined the Society in 1905, and on the occasion of the members' visit to Liverpool, during the Presidency of Mr. Walter Thomas, he took an active part in the arrangements.

Mr. H. Gill has been elected a member of the Council of the Nottingham Architectural Society.

The Annual Convention of the Alberta Association of Architects was recently held in Calgary, when Mr. R. W. Lines, of Edmonton, was elected Hon. Secretary, Examiner and Librarian.

Mr. T. Beecroft Atkinson, of Hull, has been awarded the first and second prizes of £10 10s. and £6 6s. respectively, offered for competitive designs for the new offices proposed to be built on the guardians' land in Margaret Street, Hull.

At a meeting of subscribers to the new Town Hall at Bethesda, it was announced that £600 had already been subscribed. Plans and specifications of the new buildings, prepared by Mr. R. Ll. Jones, architect, Carnarvon, were submitted and approved.

The parish church, Coldstream, situated in High Street, Coldstream, N.B., replaces the old parish church, of which the tower and belfry are incorporated in the new building. The exterior is somewhat similar in style to the old building, the chief features being round-headed windows with architraves and projecting keyblocks, and the wall-head finished with a simple cornice and parapet. The architect is Mr. J. M. Dick-Peddie, of Edinburgh.

A perspective drawing of the design submitted in the recent Competition for St. Catharine's Church, Wotton, Gloucester, by Mr. Harold S. Davis, M.S.A., and Mr. Harold F. Trew, of Gloucester, has been hung in the Royal Academy Exhibition. The perspective drawing is by Mr. Harold F. Trew, a Student of the Society, and the first holder of the Scholarship. Two drawings of works executed from the designs of Messrs. Wills & Son, of Derby and London, have also been hung.

Mr. William Alphonsus Scott, A.R.H.A., A.R.I.B.A., of Mountjoy Square. Dublin, and William Street, Drogheda, has been elected to the Professorship of Architecture in the National University, rendered vacant some time ago by the death of Sir Thomas Drew, F.R.I.B.A. After serving his articles to the late firm of Sir T. Deane & Son, of Dublin, now Mr. Thomas Manly Deane, Mr. Scott took up in a practical manner the study of Early Christian Architecture in Ireland, a period of art in that country much neglected by architects generally. Mr. Scott's executed works include the Spiddal Church, Co. Galway, the O'Growney Memorial, Maynooth, Churches at Enniskillen and Loughrea, and the new Diocesan College at Galway, not yet completed. Professor W. A. Scott is a Silver Medallist of The Society of Architects, a Past Member of Council and Examiner in Planning and Design.

A Member of the Society desires to share his Offices in the City with an Architect and Surveyor, with a view to mutual assistance or a partnership might be entertained. Enquiries should be addressed to the Secretary in the first instance.

The Journal of The Society of Architects.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Special General and Ordinary Meetings.

A Special General Meeting of The Society of Architects will be held at 28, Bedford Square, London, W.C., on Thursday, May 11th, 1911, at 8 p.m., for the purpose of confirming the resolutions passed at a Special General Meeting held on April 20th. The notice convening this meeting has been sent to every member.

This meeting will be followed by the Seventh Ordinary Meeting of The Society of Architects for the Session 1910-11.

Agenda:

- 1. The President to take the chair,
- 2. Minutes of the Ordinary Meeting held on April 6th, and of the Special General Meeting held on April 20th.
- 3. Announcements. Travelling Studentship, etc.
- 4 Ballot for candidates for Membership and Studentship
- 5. Paper on "Hospitals," by Mr. A. SAXON SNELL, F.R.I.B.A.

Light refreshments will be served after the meeting.

Meetings for May.

- May 1st. Last day for submitting Travelling Studentship Drawings.
 - ,, 3rd. Visit to Building Trades' Exhibition.
 - ,, 4th. Smoking Concert and Exhibition of Students' Drawings, 28, Bedford Square, at 8 p.m.
 - ,, 10th. The Society of Architects Lodge Meeting, Liverpool Street Hotel, E.C., at 4.30 p.m.
 - ,, 11th. Special General (Confirmatory) Meeting at 8 p.m.
 - ,, Ordinary Meeting at 8.15 p.m. Paper on "Hospitals," by Mr. A. Saxon Snell, F.R.I.B.A.
 - ,, 20th. Visit to Lambeth Palace.

THE

Journal

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[New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Prelate Architects of Lambeth Palace.

By S. W. Kershaw, M.A., Hon. Mem. S.A.

The names of Chichele, Morton, Pole, Laud and Juxon, claim a chief place in the annals of this famous structure. J. R. Green, the historian, wrote, "the Church building eras of English history have been marked by the lives of noted men in the church." Round Lambeth, history and architecture meet, and are pourtrayed in the lives of those Prelates who built portions, or repaired what the ravages of time had swept away. The memory of events in our national life clings to the ancient walls, linking up the Tudor days with the present century.

Henry Chichele, founder of All Souls', Oxford, was a great promoter of learning; his preferment was rapid, he was made Chancellor, Bishop of St. David's, and often acted as diplomatist abroad. His name is also associated with the Chichele professorship at Oxford, while at Higham Ferrers, Northampton, that county famed for its churches, he built a college for secular priests, and a hospital for poor men.

At Lambeth, he is credited with the work of the "Lollards," or otherwise called "Water tower" of stone and brick, one of the most interesting parts of the Palace The accounts in the archives confirm this statement, and that the tower was completed in 1435—other evidence, viz., the arms of this Prelate over the canopied niche on the outside wall of the tower also identifies him with this building. In the Library (Juxon's Hall) are his arms on stained glass, recalling the fact that he repaired, if not partly rebuilt the earlier hall, destroyed in the Civil war, and re-erected by Juxon. At Canterbury, the steeple and part of the tower at the south-west end of the Cathedral is attributed to Chichele, and it is to be regretted that a great portion of this tower was removed some years ago.

With the advent of Cardinal Morton, builder of the fine entrance gate of the Palace (an example of the union of defensive and domestic architecture) a wider interest opens. The part he played in history, specially in the factions between the York and Lancastrian party, is well known, he was made Lord Chancellor, Master of the Rolls, and was skilled in law, and Lord Bacon describes him "as wise and eloquent." As Bishop of Ely, he lived at his town house in Holborn; the chapel of great beauty, is one of the few remains of old London. That famous Shakesperian scene is placed here, in the days of King Richard the third, when "good strawberries" grew in Holborn and the King besought the Bishop to "search for some of them." Primate and Premier alike, Morton encouraged the arts and learning and some of his architectural work took an engineering turn. We read of his embanking the fen waters between Ely and Peterborough, and the better to direct the scheme, he built a brick outlook tower on the site of the ruined Wisbeach Castle —the name "Morton's dyke" recalls this enterprise. This Archbishop erected the old part of Hatfield house, and in his own Diocese, repaired his manor houses of Knole, Maidstone, and Charing, and is said to have been a benefactor to old Rochester Bridge. It is singular that no likeness exists of him, save on a panel painting on the screen at Plymtree Church, Devon, where he is represented with Henry the Seventh and Prince Arthur. The roof of Bere Regis church, Dorset, claims to be one of his many works, and it is possible he may have had a part in the church at Plymtree.

At Lambeth, the famous Sir Thomas More, then a child, formed part of his household, and afterwards visited Archbishop Warham, Morton's successor.

Cardinal Pole's tenure of office (1553-58) was too short to chronicle many events, to him is assigned the erection of the galleries over the once standing cloisters, taken down about 1830, and though of small architectural merit had their place in history as the home of the famous library, now in Juxon's hall. A better spirit prevails to-day; history in stone is more respected, a fact endorsed by the Hon. James Bryce that "no kind of historical evidence is so certain as that supplied by an ancient building." The Tudor days were times of rich display in the homes of statesman and noble alike, and Queen Mary had many of the rooms at Lambeth hung with tapestry on the advent of her cousin Reginald Pole.

In Archbishop Laud (1625-45) we recall a restless activity, combined with an interest in art and learning, as gleaned from the pages of his famous "Diary," where church matters, politics and affairs are minutely described. As lord Chancellor of Oxford University, it is natural many traces of his influence would be visible, the quadrangle of his college (St. John's), is marked by much beauty of effect and ornamental detail, while it is said he was instrumental in the erection of Cuddesdon Palace, destroyed in the Civil war and rebuilt in 1679. For the enrichment of the University, he purchased Greek manuscripts, besides giving several of his own, and the "Laud" collection in the Bodleian Library is of

world-wide fame. His "Diary" is preserved at St. John's College, and his efforts to set up a press for printing Greek was another of his projects. It is however with Lambeth that this Prelate's name is so lastingly connected.—the late renaissance screen in the Chapel bears his arms, and the stained glass windows, in his day "pieced and out of order" were repaired from the earlier designs of Archbishop Morton. The subjects of these windows, alleged to be of a Popish character, formed one of the charges in the Primate's trial, so minutely given in Prynne's "Canterburies doom." The Archbishop aided in the restoration of St. Paul's Cathedral by Inigo Jones,-in All Hallows, Barking, he was buried (ultimately in the chapel of St. John's College, Oxford), while S. Catherine Cree was consecrated by him. Earlier days connect this Prelate with his Palace at Abergwilly, where he built the Chapel, and, nearer London, Croydon Palace bears the impress of his time, in alterations of the Chapel and other parts. The Laudian period witnessed many striking events, none more eventful than the war cloud, which brought about the Archbishop's downfall,-together with the fact that he continued blind to the force of popular feeling against Church and state and thus alienated many who would have upheld him in that dire rebellion time. With Archbishop Juxon (1660-3) the last story of olden Lambeth is told, in his re-building the great Hall, which, phœnix-like arose from the ruins of the earlier one, destroyed in the Civil war. In its renewal it perpetuated the style of Chichele's hall, and that Gothic feeling which had lingered late into the seventeenth century, a fact which Pepys in his visit to Lambeth in 1665 records, when describing the "new old-fashioned hall." In past days, this noble room witnessed many famous gatherings on state, ecclesiastical and other matters. Here Archbishop Grindal, Parker and Whitgift welcomed the great Queen Elizabeth, and the hospitality of those and later days was free to all of certain rank.

Though Dr. Juxon's tenure of the See was very short, his earlier life as Bishop of London was full of eventful history, he was Lord High Chancellor and had supervision of many departments of the Government. At Oxford, he was engaged in reforming the Statutes of the University, and with Laud and Bishop Wren, took part in the revision of the Scotch Prayer book. He was interested in a scheme for the improvement of St. Paul's, and spent much in repairs at Lambeth and on his home at Croydon Palace. Obliged to remain obscure during the later Commonwealth, he visited his friend Archbishop Laud in the Tower, in 1641, and as is well known, attended him in his last hours. Strong and loyal, he was one of the few men who in times of strife made no enemies. Lambeth will always enshrine his memory in the noble hall over which rises aloft the graceful ironwork of the vane, enclosing the Primate's arms. This sketch of those Prelates who have enriched the annals of Lambeth, will serve, I trust, to recall the recent visit to that historic spot.

Proceedings.

A SPECIAL General Meeting of The Society of Architects was called for Thursday, May 11th, 1911, at 28, Bedford Square, W.C., at 8 p.m., for the purpose of confirming the resolutions passed at the Special General Meeting held on April 20th.

The President (Mr. Geo. E. Bond), on taking the chair, referred to the fact that at the previous meeting he had undertaken that the agreement between the Councils of the Society and of the Royal Institute should be completed before the resolutions then passed by the Society were presented for confirmation. That agreement was ready for signature, but only that afternoon they had received an intimation of some technical difficulty on the part of the Royal Institute, and the Council of the Society felt it was not desirable that the matter should proceed until everything was in order. He therefore thought the better course to adopt was to adjourn the meeting pending the signing of the agreement by both parties.

It was moved by Mr. Percy B. Tubbs, f.r.i.b.a., seconded by Mr. G. A. T. MIDDLETON, A.R.I.B.A., and unanimously resolved:—

"That this meeting stand adjourned until the agreement between the Councils of the Society and of the Royal Institute is signed by both parties."

The Seventh Ordinary Meeting of The Society of Architects for the Session 1910-11, was held at 28, Bedford Square, W.C., on Thursday, May 11th, 1911, at 8.15 p.m.

MR. GEO. E. BOND, J.P. (President), having taken the Chair, the minutes of the previous Meeting, as printed in the *Journal* were taken as read, and were confirmed and signed. Ten nominations for Membership were announced.

Travelling Studentship Competition. The President reported that five sets of designs were submitted for the Travelling Studentship and that the Council had awarded First Place to the design marked No. 2. He then opened the sealed envelope marked No. 2 and declared the winner to be Mr. J. R. Leathart, Canterbury Road, Brixton, S.W.

The Ballot was then taken and the following Candidates declared to be duly elected:

As an Hon. Member:

MONKSWELL. THE RT. HON. LORD.

18, Lower Sloane Street, S.W.

As Members:-

Adams. John Albert, .

Bannan, Henry Watkins,

Bazeley. Montague Alton,

14, St. Aubyn Street, Devonport.

8, Philpot Lane, E.C.

21, Princess Square, Plymouth.

Proceedings.

Bowden. James Albert, Bowhill. Frank Jermyn, Bryon. Albert Edward.

BURKE. MARTIN JOSEPH, COLE. ARTHUR, COLLIER. LEONARD HENRY, DEAN. JOHN HAROLD,

FRAZER. LEWIS,

FYVIE. JOHN DOUGLAS,

GEORGE. FRANK,

GORMAN. JOSEPH BROWNE DICK,

GRIFFITHS, JOHN EGBERT, HATFIELD. JAMES MARTIN,

HEATHCOTE. EDGAR HORACE, M.A.

HOE. WILLIAM,

HOLBROW. ALFRED ERNEST,

HOUCHIN. HAROLD ROGERS, JOHNSON. JOHN GRAHAM,

KIRK. WALTER,

LAMBERT. ALBERT EDWARD,

NEWCOMBE. PHILIP CLIVE,

PATTINSON. JOSEPH,

PEARSON. FREDERIC CAVENDISH,

PETCH. WILLIAM,

PHILLIPSON. JOSEPH WILFRID FEATHERSTONE, PIERCY. ARTHUR RAYMOND PRATT,

RICHARDS. EDWIN WILLIAM GRUFFYD,

ROBERTS. FREDERICK ANDREW,

Saunders. Malcolm Tribble,

SHAW. JOSEPH EDGAR,

SHEPHERD. ERNEST EDWARD,

SMART. JOHN WALKER,

THORPE. FRED.,

WALTON. WILLIAM BILLINGTON,

WEBB. ARTHUR FREDERICK,

WHITE. OSWALD,

WILKINSON. STEPHEN,

WILLIAMS. ERNEST,

WOOD. ROBERT SYDNEY,

VENNER. ALBERT WARING,

Queen Anne's Chambers, Westminster, S.W.

1, Lawrence Pountney Hill, E.C. Devonshire Villa, Devonshire Road, South

Lambeth, S.W.

H.M. Office of Works, Dublin.

140, Norwood Road, West Norwood.

71, Colmore Row, Birmingham.

6, St. George Gate, Doncaster.

80, Pall Mall, S.W.

17. Victoria Street, Westminster.

9, Dartmouth Street, Westminster, S.W.

184, Laurier Avenue W., Montreal, Canada.

5, Brynterion Terrace, Criccieth, N. Wales.

1, Palewell Park, East Sheen, S.W.

110, Cannon Street, E.C.

39, Wardour Street, W.

13, Cowper Road, Hanwell.

85, Fleet Street, E.C.

Station Approach, Gerrards Cross, Bucks.

Withyham, Tunbridge Wells.

28, Park Row, Nottingham.

87, Pilgrim Street, Newcastle-on-Tyne.

Elim Grove, Windermere.

15, Woodfield Crescent, Ealing, W.

8. Buckingham Palace Road, S.W.

8. Grainger Street, Newcastle-on-Tyne.

High Street, Stoke-on-Trent.

Glebeland House, Merthyr Tydfil.

Earl Road, Mold.

16, Palace Street, Buckingham Gate.

11, Hurstleigh Terrace, Harrogate.

New Bridge Street, Nuneaton.

28, York Road, Perth.

7, Clegg Street, Oldham.

3, Bright Street, Blackpool.

High Street, Blackwood, Mon.

32, John William Street, Huddersfield.

32-1, Standard Buildings, Dalhousie Sq., Calcutta.

Alliance Chambers, Corn Street, Bristol.

833, Dorchester Avenue, Crescentwood,

Winnipeg.

Redhill, Surrey.

As Students:-

Baylis. Arthur Gidlow, Cavanagh. Leonard, Chilton, Ernest Alfred, Griffiths. Williams, Birdholme, Wath-upon-Dearne, Yorks. 2, Selwyn Road, Upton Manor, Essex. 101, Langney Road, Eastbourne. Tlys Arfor, Criccieth.

The Journal of The Society of Architects.

GRIMSHAW. JAMES ALLAN,
HOLROYD. WILLIAM,
JONES, ARTHUR HENRY,
JONES. LIONEL HERBERT,
PASSLY. ERNEST A. STEWART,
RUSSELL. GEORGE HERBERT,
TAYLOR. FREDERICK JOHN,
URWIN. SAMUEL ERNEST,
YOUNG. ALFRED GORDON,

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Bank Buildings, Accrington.

Tay Cragge House, Thornbury, Bradford.

131, Edinburgh Road, Kensington, Liverpool.

Glendale, Newport, Salop.

Gad's Hill, Gillingham, Kent.

Highbury Lodge, Hitchen, Herts.

26, Wilberforce Road, Finsbury Park, N.

Silverbeech, Oxford Road, Moseley, Birmingham.

3, New Road, Avenue, Chatham.

MR. A. SAXON SNELL, F.R.I.B.A., then read a paper on "Hospitals," which he illustrated by means of drawings.

MR. H. FREYBERG, F.S.I. (London), in proposing a vote of thanks to the lecturer, said Mr. Snell's work was well known to all of them, and he could not help saving. that if the rules which the lecturer laid down in the paper written by him in 1905, on "Sanitary Building Construction" were better observed by those responsible for the erection of our dwellings, there would be much less need for such large hospitals. Mr. Snell had mentioned the advisability of raising the temperature of the incoming air, by slightly warming it at the hot-water coils. Mr. Freyberg would much like to know how that temperature was checked, and regulated, and also whether any form of air-filtration was adopted? in order to keep out as far as possible the dust and dirt so prevalent in the external atmosphere of our large cities. Mr. Freyberg deplored the way in which buildings generally were being cramped and confined, and especially so in connection with recent development of suburban building land. He learned from the lecturer with even greater regret, that much the same conditions applied to some of our hospitals, through no fault of the architect. He hoped the time would soon come, when the very first consideration in the erection of buildings, whether for domestic or public purposes, would be the provision of ample air space on all sides. In conclusion, he congratulated the Society on their good fortune in being offered the opportunity of listening to so interesting a paper read by such a master as Mr. Saxon Snell.

Mr. Chas. Watkins (London), in seconding the vote of thanks, said the lecturer had made no reference to a disinfector which was an absolute necessity in a hospital. With regard to flues no mention had been made as to whether they were ever cleaned. Mr. Snell had advised them not to tile their wards; he presumed that was on account of the joints. There should be, he thought, an observation ward, because very often there were patients who did not require immediate attention and in the course of a few hours were ready to leave again, and who, therefore, could not be put with the other patients in an ordinary ward. The architect was sometimes troubled with a Committee who knowing little or nothing about the subject would persist in trying to aid him in his work.

MR. G. A. T. MIDDLETON, A.R.I.B.A., Past Vice-President (London), in supporting the vote of thanks, said it was all very well to say that they must warm the air before admitting it to a hospital ward in this country, but the same necessity would not arise in a hot climate where provision would have to be made to keep out excessive heat.

MR. CHAS. W. BALL (Southsea), in supporting the vote of thanks, said he was very closely connected with hospital work, being a Governor and on the Management and House Committees of a large hospital, and he could testify that Mr. Snell had kept to the text throughout. The only thing he felt was that the paper was too short. It might have been extended to almost any limit and it was wonderful how Mr. Snell had given so much information in so short a time. A paper on a "Hospital Ward " alone would be a very interesting one and might well occupy a whole evening. As it was they had had very few details given them, but a good, general survey of the whole question. The Hospital was publishing a ward unit every week commencing with the current issue. They gave a sketch plan of a ward for twenty beds at Northampton, a hospital designed by two men, one of whom was a Doctor and the other an Architect, and which was the head man of the two he did not know. He agreed with Mr. Snell in stating that the axis of a ward should be N. and S. Many architects made the mistake of placing their sanitary spurs at the southern extremity of the ward which arrangement blocked out a good deal of light. It was obviously very much nicer to have a balcony at that end. Another object in raising the wards above the surface level, beyond those mentioned by the lecturer, was the opportunity of placing the hot water pipes and electric wires, etc., underneath, and so providing a much better means of access to them. The question as to whether the Ward Sisters should have a room to themselves had been discussed a good many times and he ventured to suggest that it was not necessary. They had a great respect for their Sisters, who did their work very well, but the general feeling was that when a Sister was on duty she should be in the ward itself. He thought if a Sister were given a writing table in the ward it was a much better arrangement.

The PRESIDENT then put the vote of thanks to the meeting and it was carried by acclamation.

Mr. A. Saxon Snell, f.r.i.b.a., in reply, said he was greatly obliged for the vote of thanks. It had given him great pleasure to read the paper, although he knew only too well that it was merely an outline of a vast subject. One could, as Mr. Ball had remarked, spend a whole evening on the subject of the ward unit alone. He thought it was a mistake for an architect to try to design a hospital without the assistance of a doctor, and a worse one for a doctor to try it without an architect. He did not think any architect could design a hospital quite by himself—he would have to go to those who managed it and ask what end they

wanted to arrive at. Then it was for the architect to provide the means towards that end. He entirely agreed with Mr. Ball in regard to the Ward Sisters, and it was quite refreshing to hear a Hospital manager take the view he had expressed. It had sometimes been suggested that Sisters might have an office in the ward, but even that he thought would be a mistake. The regulation of the temperature of the air was a very difficult subject, and at the present moment they had got to make the best of things as they were. The only way seemed to be by one of the mechanical systems, but he thought the evil of them was so great that it was far better to adopt the rough and ready method he had described and by regulating the inlets and keeping up the fires they could get almost any temperature they wanted. The question of temperature was not after all of such great importance, for in Miss Nightingale's book to which he had referred, there was an account of a military hospital which became so full that the authorities were obliged to place many of the patients in tents amid the snow on the hillside, and, speaking from memory, whereas in the hospital itself the number of deaths recorded was three in ten, on the hillside it was only one in ten. The filtration of air was a thing they could very gladly do with, but he resolutely refused to put in any kind of filter because he knew that from the day he did so they would commence to collect all kinds of dirt and would never be cleaned, however easy the process of cleaning might be. A dirty filter was worse than no filter at all. Every hospital, of course, should have a disinfector, a full-size one if it could be afforded, and a small destructor should be provided for destroying surgical bandages and so forth. With regard to the tiling of wards he had himself tiled a ward at Charing Cross Hospital, but theoretically he thought they were wrong because they contained so many spaces. The main point in their favour, however, was that they were very easy to keep clean. An observation ward was of course necessary. Generally speaking, it was used in connection with the out-patient's department. The doctor in examining a man might think he was likely to develop something infectious and would put him in the observation ward, where he would be isolated for about twenty-four hours, when if the disease developed away he would go to a fever hospital.

Hospitals.

By A. SAXON SNELL, F.R.I.B.A.

HEN you did me the honour of inviting me to read a paper before the Society, you naturally and kindly suggested a subject with which I have been more or less closely acquainted throughout my professional life.

I cannot guess whether you hope or expect to hear something new on this old subject, but I may at least trust that you will not feel disappointed if I confine myself to hospitals as they are, rather than to what they might be, and may be one day. The ideal hospital of the future would no doubt be a fascinating subject, but it is of too wide and impractical a nature to be dealt with in an evening's discussion.

The building of hospitals is one of the most ancient and interesting instances of the progress of mankind in the direction of altruistic effort. It was, and is, a practical expression of man's sense of his responsibility to his fellow creatures; and as such, it ought to command our wide and increasing sympathy.

It is not, however, my purpose to-night to deal with history, or to refer, other than quite casually, to ancient examples which have for us a sentimental interest only, though they do also mark the progress we have made. We can learn little from them except what to avoid.

Modern hospital planning in this country dates from 1858, when the Blackburn and (a little later) the Herbert Hospitals were built. Then, for the first time the pavilion system was adopted. Previously, the wards generally consisted of a number of rooms containing a limited number of beds generally ranged on each side of an enclosed corridor. With but one external wall, this necessarily entailed absence of through ventilation, a matter which we shall see is of vital importance.

The administrative offices and sanitary conveniences were all in more or less direct communication with the wards; and the materials and methods of construction did not differ generally from that of ordinary buildings for the healthy.

These are the main points which mark the difference between old and new hospitals, and to appreciate the importance of the change in these matters, we must look at the fundamental principles which actuate them.

Now, as a first point. I will remind you that a hospital is, or should be, designed first and last for the housing and cure of the sick, diseased, and injured; an elementary proposition too often overlooked, or not always realized in the building. We may start out with that ideal before us, but sooner or later other considerations obtrude themselves to its detriment. To see clearly how this proposition is to be realized, let us examine in detail the thing to be done and the condition under which it can be done.

Sickness may be defined as the temporary disorganization of our internal machinery. Disease we will call the invasion of our system by destructive or paralyzing forces. Injuries the violent breakage, laceration, or disruption of the bodily structure.

Shortly put, all disease, sickness, etc., is disorganization or temporary disarrangement of our bodily machinery. Cure is restoration or reorganization.

Our bodies are so wonderfully designed, that given fresh air, heat and water, they can affect their own repairs with but small outside help, the amount of which varies of course according to the extent of the disorganization or injury. That outside help comprises mainly careful and skilled nursing and medical or surgical skill.

If all these were so to speak on hand at all times for use as required, hospital planning and administration might be simple and stereotyped; but as we can only obtain them in varying proportions, we have to adapt our systems and buildings to meet the circumstances.

I feel that some apology is due to you for thus stating these elementary propositions. The truth is that though one may have been engaged, as I have, for 30 or more years upon hospitals and buildings akin to and connected with hospitals, one is driven again and again to recall them if progress is to be achieved. If we are inclined to find satisfaction in the enormous progress achieved in hospital design, it is salutary to turn over the pages of Miss Nightingale's *Treatise upon Hospituls*, published as long ago as 1863, and the works of De Chaumont and Galton. We shall quickly realize that we have not even yet put into practice all the lessons they taught us from their long and close acquaintance with the realities of sickness and disease.

No doubt, it is true that every one of us endeavours, and in part succeeds, in making each building we design an improvement upon its predecessor; but these improvements are too often in matters of detail only, and our satisfaction and absorption in them is liable to lead to forgetfulness of larger problems as yet unsolved.

Do we not indeed see this tendency even in the purely architectural design. The columns and cornice of a Greek temple were but idealized construction, and the form of each part had some definite relation to the practical work it had to do. Who, contemplating the latest creations of Neo-Greek can trace any connection between the details of the most pleasing and refined elevations, and the original purpose of cornice, column, and beam. The beauty and refinement may be there, but they are merely applied ornament without relation to realities.

In the same manner, it is possible to improve and refine details of hospital design whilst losing sight of their practical purpose.

The really perfect hospital will be realized only when we can free ourselves from conventional ideas and try to get a true sense of the end to be achieved, and keep that end steadily in view. No one of us can hope to make a revolution, but each one of us can do something towards it if we have will and initiative.

One might multiply these abstract propositions indefinitely, but I think it will be more interesting to you if I descend to more practical matters. I propose, therefore, to give a general description of the buildings which go to form a modern hospital, and to deal in detail with the most important part, i.e., the Ward Unit.

Site.

The ideal site has often been described at length, but may be shortly defined as being in the open country, but within convenient distance by rail or road of the town or area from which the patients will mostly be drawn. A light soil overlaying gravel or permeable chalk sloping gently towards the S.E., and protected by hills or rising ground or trees from the N., N.E., and N.W.

A good water supply should also be available, and facilities for disposal of sewage.

For special hospitals which depend upon the services of the highest medical and surgical skill, much has to be sacrificed to bring them within reasonable distance of the specialist's consulting room.

The disposition of the buildings depends of course largely upon the shape and area of the site, and the only general rules we can make is that the ward blocks should be so placed as to be free from the traffic of the other buildings, and the noise and dust of a public highway, should not be shadowed by other buildings, and should have uninterrupted light and air.

This plan does not by any means pretend to be ideal, or it is only so to the extent circumscribed by English limitations.

In this country, we do not appear to be able to allow ourselves the luxury of spaciousness and magnificence, which are quite common features of continental public buildings. It has always been so, as witness the size and restraint of our cathedrals and castles as compared with those say in France. Our genius is confined to our country houses, than which nothing more perfect, or indeed approaching them, is to be found anywhere in the world.

In the case of hospitals, you have only to study their several block plans and note how the Germans space their ward blocks, which are at most two stories in height only.

Our reason is no doubt that in England so many of our buildings, and particularly hospitals, have been built and endowed by individuals, instead of, as abroad, by the State; and States of course have large resources to draw upon.

The public or road approach should be on the N. side from which easy access is obtained to the administrative offices, leaving the ward blocks freely exposed to the S., S.E., and S.W.

Lodge.

Commencing at the entrance gates, we have a small lodge placed midway between two pairs of carriage gates. One of these entrances should be reserved for goods traffic, and should have a full-sized weighing machine on the inner side of the gates. It is always to be desired that carts bringing in coals, provisions, etc., should be weighed on entering and leaving for the purpose of checking.

The lodge should be occupied night and day, and be in telephonic communication with the rest of the hospital.

Out-Patients' Department.

Adjoining the lodge, I would place the out-patients' department, which should have separate entrances and exits into the road, and it should also be entirely disconnected from the other buildings. This is a point which is not always observed; indeed cannot be with some sites, especially in city hospitals.

Bearing in mind that dirt and disease are largely cause and effect, no patient is admitted to the wards of a hospital until he or she has been bathed and re-clothed in perfectly clean garments. This cannot be insisted upon in the case of out-patients, and it is obvious that dirt and disease germs to a considerable extent must be deposited in that particular department; and it is therefore best isolated.

The out-patients' department is too large to describe here in detail. It comprises a number of consulting rooms, each devoted to certain classes of disease and surgery ranged round a large waiting hall.

The main point to be observed in the plan is that the hall should be sufficiently large, along a long parallelogram to allow of easy classification of the patients. In large institutions it is customary to have smaller waiting or preparation rooms intervening between the hall and each consulting room, where patients can undress if necessary, and otherwise be prepared for examination by the surgeon or physician.

It is also important to provide separate exit doors for the consulting room, and if it can be so arranged patients should not return to the main hall, but go directly into the waiting hall adjoining the dispensary. This is very difficult to manage unless the consulting room is lighted from the roof, as is the case at Charing Cross Hospital.

Casualty Department.

Adjoining, and indeed forming part of the out-patients' department, is the casualty department, which, for identical reasons, should also be disconnected from the main building.

For this department it is essential to have easy and quick access from the public road, and it should be possible to bring a cab or vehicle almost to the door of the operating room, because fatal damage may be done to the injured person in removal. At Charing Cross Hospital the doors actually open on to the court yard.

Attached to the operating room would be a waiting hall for patients' friends, and a room or small ward for the injured after treatment.

Observation Wards.

Beyond this block is a smaller one for the observation of cases suspected of infectious disease, or such as may develop in the hospital itself. This building should have no closed communication at all with other buildings.

Isolation Wards.

In all hospitals a few rooms or a small isolated building is provided for fever cases which may arise among patients admitted to the hospital for other diseases. It is of course better that such cases should be at once removed to an infectious hospital, but it is not always practicable. The planning and fitting of this building falls under the head of fever hospitals, which is a subject for a separate paper.

I need only say here, that if one, however small, is attached to a general hospital, it should be absolutely isolated with a zone at least 40 feet wide all round. It should be complete with kitchen and nurses' quarters.

Such a building planned on the lines of the Pasteur Hospital at Paris is described in the short paper I read last year before the Royal Sanitary Institute.

Medical School.

On the right of the lodge is placed the medical school, lecture room, etc., and beyond these the pathological department, museum, mortuary, and engineering plant house, etc.

The medical school should contain besides a large lecture theatre, smaller lecture rooms, museum library, students' studies. The students' recreation and reading room may be conveniently placed in the same building, though it is not altogether to be commended. They would be better placed in connection with the living quarters or hostel if one is provided.

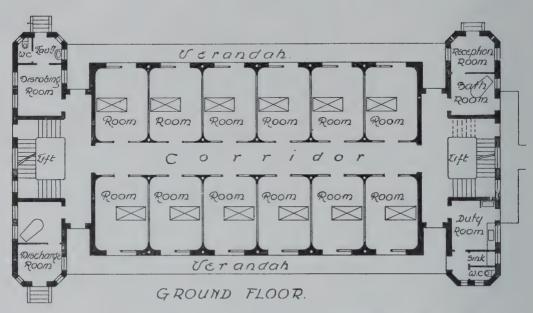
Mortuary.

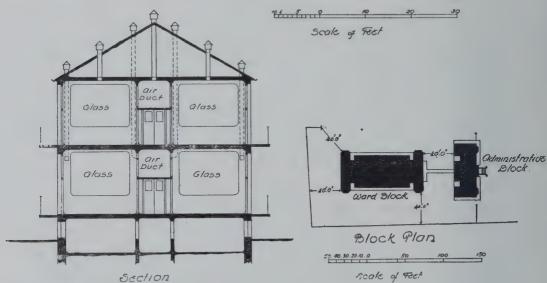
A hospital mortuary should be something more than a sort of cold storage room.

"How wonderful is Death
Death and its Brother sleep
. . . . so passing strange and wonderful"

sang Shelley; and even the meanest of us will always feel awed in its presence; always by instinct pay respect to the cold clay save only those whom constant familiarity have rendered callous. It has always appeared to me a beautiful idea to make the mortuary a consecrated place.

Even in public mortuaries this is recognized, and you will find for instance, that in Marylebone, bodies are placed in a building which is more or less a small chapel.





DESIGN FOR A FEVER ISOLATION HOSPITAL, BY A. SAXON SNELL, F.R.I.B.A.

Block kindly lent by "The Architects" and Builders' Journal."

For a hospital, it may be quite a small place if there is adjoining a large room or preferably a mortuary chapel. You may call it, or use it as, a "viewing room."

In practice, bodies are placed in the mortuary proper, which is severely and coldly practical in its construction and finishings, with its washable walls and floors, and ample ventilation.

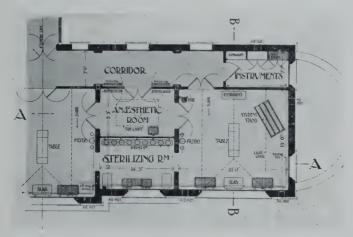
When friends or relatives come to see their dead, the body is brought into the viewing room or chapel, to spare them the gruesomeness of the mortuary.

It has always seemed to me there should be a separate exit from the mortuary yard to the public road, as a hearse and funeral procession is not a cheerful sight for either the patients or staff.

Attached to the mortuary, or in close proximity, is the post-mortem room and pathological laboratory. Both rooms must be severely plain with washable and impervious walls and floors. The danger of blood-poisoning awaits the careless operator in these rooms. Pathological theatres are seldom used now. Instruction in pathology is given in the lecture rooms, and practical demonstrations are held with small classes.

Operating Room.

Every hospital must have an operating room, and its area and arrangement differ according to whether the hospital has or has not a medical school attached to it. In the former case, all that is required is a fairly large room preferably square



on plan, say from 200 to 250 feet in area. Its adjuncts comprise a small sink room, anæsthetic room, and sometimes what is clumsily called an after-recovery room, which is merely a small ward in which to place a patient immediately after an operation.

Separate operating theatres are often provided one to each surgical ward, partly to avoid carrying patients long distances and partly because distinguished surgeons differ so much in their ideas as to fittings, arrangements, etc. Otherwise, a more reasonable and economical plan is to place them all in one building with their adjuncts in common. A very good arrangement may be seen at the London Hospital.

Administrative Block.

Coming now to the main range of buildings, we should have in the centre an administrative block which should contain the offices, kitchen stores, etc., and beyond it to the south or even on the upper floors, the nurses' home may be placed.

I say this with some reserve, as for many reasons the nurses' home is better separated entirely from the hospital proper; and indeed, it is a more ideal arrangement to place this block in its own separate grounds and out of sight of the hospital. No one who has not undergone the hard life of a nurse, surrounded on all sides by pain and suffering for many more hours than the British workman thinks desirable for his own work, can realize the relief of different surroundings and atmosphere.

The administrative block contains all the rooms, offices, etc., used in the general administration of the hospital, commencing with the Secretary's department, Committee room, Medical Officers' consulting rooms, waiting room for visitors, general kitchen, stores, Matron's office, etc. Obviously it is best placed in the centre of the establishment, and its planning is governed by an appreciation of the various uses of its several parts. It need only be said that the Secretarial and Office part should be well separated from the kitchen and stores department. It is usual to make the main corridor the division between them.

Kitchen and Stores.

One large kitchen really suffices for a hospital. It is quite unnecessary to provide a separate one for the staff.

In many hospitals a separate kitchen is provided for and placed in the nurses' home; but it is a more economical plan to have one kitchen only, and if the nurses' home is at a distance from the hospital, the nurses' dining room may be placed in the main administrative block close to the kitchen.

Except in the neighbourhood of large towns or cities, it is well to have plenty of storage room, as it is cheaper to buy goods in large quantities. In large centres, however, weekly or even daily deliveries are easily arranged for.

Nowadays, we use little or no coal in the kitchen for cooking, which is done almost entirely with gas and steam.

I need scarcely add that both kitchen and scullery should be well lighted and ventilated, and preferably by lantern lights. Also that the walls should be lined at least 6 feet high with glazed bricks or tiles. Floors are best covered with hard vitrified tiles with close joints. It is also well to bear in mind that rounded corners and skirtings are as necessary in these rooms as in the wards.

Boiler House.

In any institution larger than a cottage hospital, steam is essential for all kinds of purposes from heating to sterilizing; and a large and well equipped boiler house is desirable.

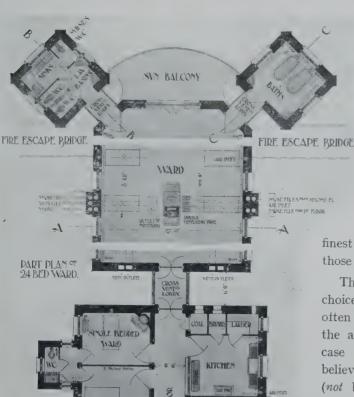
It is a great mistake for architects to overlook this important matter and to imagine that any small and out-of-the-way corner is good enough for the boilers and engineering plant. The department is best placed in a detached building, and so arranged that there shall be ample room not only for the necessary boilers and plant, but also that these can be renewed or replaced at any time without the necessity of pulling down buildings or walls.

Plenty of boiler power is really economical. It is cheaper in the end to work a large boiler at low pressure, than a small one at high pressure.

Steam may be required not only for heating and cooking, but also for laundry purposes and electric lighting, and many small matters.

Ward Blocks.

Right and left of the administrative block would be the ward blocks, each not more than two stories in height and connected on the ground floor only by a broad corridor; although a connecting subway is useful, if it is not entirely necessary.



KING'S COLLEGE HOSPITAL.

DAY ROOM

OVBLE BEDDE

There are differences of opinion upon that matter. The ward blocks should be so spaced that the distance between them is not less than $1\frac{1}{2}$ to twice times the height of the blocks. This minimum distance is, I am afraid, not often attained even in some of the

finest hospitals, especially those in Urban centres.

Those responsible for the choice of sites have too often an indefinite idea as to the area required. In the case of King's College, I believe they were advised (not by an architect) that the area required was one acre to every 50 patients. That should be sufficient for

ward blocks and administrative offices; but they did not add any additional ground for the large out-patients' department, medical school, etc., and I imagine the same thing happened at Manchester. Once again we have to acknowledge that they manage these things much better on the Continent. Ample space is seldom wanting in French or German hospitals.

We have noted that sunlight and air are the two most important factors in the cure of sickness and disease. These are best secured by adopting the pavilion form of ward, and placing the axis approximately N. and S. The East, South and West walls are thus all exposed more or less to its rays at some period of the day, and every bed place along the walls has the benefit of sunshine.

I do not know whether anyone has, as yet, dealt with the relative value of direct and diffused light in sickness, but definite information on the subject will some day have a material effect upon the planning of wards. One gathers that direct sun's rays are the more powerful agent; yet, South light, which owing to the altitude of the sun penetrates a building to a much shorter distance than East or West, is commonly regarded as the most valuable. This is not always obvious in view of the fact that it is a common practice to build wards of exactly the same pattern on both sides of a central corridor, so that the end window in one case faces due North.

Coming now to the internal planning of the ward block or unit, I should remind you that the usual number of patients varies from 24 to 32. The smaller number is more commonly adopted at the present day. The large number was reckoned as the maximum which could be efficiently looked after by a ward sister and her complement of nurses. As in every department of life our work nowadays is more complicated and makes greater demands upon those who serve, it has been found necessary to reduce this number to about 24 as a maximum.

Of this number, 18 to 22 may be placed in the main ward, the remainder being distributed in small one and two bed wards adjoining.

The dimensions of the wards are necessarily determined by the area and cubic space required by the patients. Apart from fever hospitals, that varies according to the views of different authorities and circumstances. One thousand to 1,200 cubic feet is, I think, the minimum that should be provided in a general hospital, although in the purer and fresher air of the country, seven or eight hundred is really enough if more cannot be afforded. In the latest hospitals, this amount is largely increased. In the new King's College Hospital, as much as 1,580 feet will be provided.

Taking 1,200 as the minimum, and the height of the wards as 12 feet, it would allow 100 square feet of area per bed. 24 feet used to be considered a sufficient width for wards, but 26 feet is more general now. They are at times made even wider; but, I think, it is quite unnecessary. With a width of 26 feet each bed would have a wall space of 7 feet, 6 inches, which is quite sufficient for most purposes.

It is usual to keep the head of the bed at least 6 inches away from the wall, and this allows a width of 12 feet in the centre for stoves, tables, etc.

Stoves with open fires, should always be placed along the axis of the ward, one fire to each 700 feet is enough, if hot water pipes are provided in addition for really cold weather. The question as to central or descending flues is one mainly of appearance. One great advantage of central flues is that we are able to obtain good extraction flues for ventilation alongside the smoke flues.

There are several makes of stoves on the market suitable for wards, but they are not so often used as certain popular and widely advertised forms constructed mainly in iron and as unsuitable for the purpose as it is possible to be. The best stoves can be and are constructed entirely in brick or concrete, excepting only the grate.

Ward windows have been the subject of much controversy, and the most useful form is a combination of sliding sashes and ventilating hopper.

Great ingenuity has been expended in trying to obviate the obvious disadvantages this window possesses in the way of beads, internal angles, etc.; such, for instance, as making the sashes work in a groove, and building the frames flush with the internal surface. But none of them touch the real objection, *i.e.*, the hidden parts of the cased frame. This is very typical of so many so-called sanitary improvements in fittings; all the surfaces and parts open to view are improved and simplified, but those out of sight are ignored.

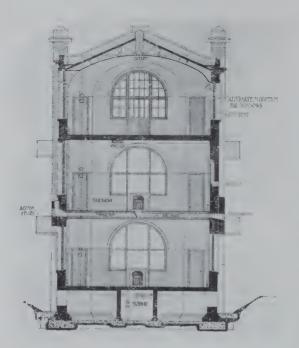
A short time ago, a manufacturer brought me what he considered a new and improved form of inlet ventilator. He showed it to me with unconcealed self-satisfaction and with an air of having brought me the thing for which I and others engaged in hospital work have been vainly seeking. He pointed out the plain enamelled surface of the front devoid of moldings and projecting hinges (when shut). I think he was grieved when I pointed out that the internal parts exhibited enough angles, wheels and undesirable areas to harbour any amount of dust and dirt. I mention this, because it is so very typical of the principle that when the eye does not see, the heart need not worry.

Returning to the subject of windows, it cannot be disputed that some form of casement in solid frames is really the best from this point of view. My personal preference is for a modification of what is known as the Middlesex Window, because it was first used at the Middlesex Hospital. At Charing Cross Hospital each window consists of a number of casements hung on centres and closing one upon the other. They are made in teak. At the Women's Hospital, Plaistow, they are made in steel; and this is undeniably the best material.

If I were to deal with all the details of construction of a hospital ward, there would be room in this paper for nothing else; and I must content myself with reminding you that the floors should be of solid fire-resisting construction and covered

with a non-absorbent, and, if possible, jointless material. I need only add that if you are interested in the matter, I shall be very pleased to exchange opinions with you or to answer any questions in my power.

Almost as important as the plan, is the section of the ward block. Always bearing in mind that the more sun and air we get in and around the ward the better,



SECTION OF WARD BLOCK, KING'S COLLEGE HOSPITAL.

it is well in the first place that it should not be overshadowed by other buildings, and in the second, that impediments to free circulation of air should be avoided.

Tollet, with a logical thoroughness which is truly French, placed his ward blocks on stilts, so that the air should have free passage under as well as around it. Recollect that the atmosphere is continually in motion, continually passing up and down, continually being purified and revivified in its motion. Check that motion which is after all the essence of life, and it begins to stagnate. Tollet made the mistake however of raising his building too high, but only because the administration—forgetting the principle he had in view-found

the space beneath the wards adaptable for enclosure as stores, etc. A height of from 4 to 5 feet only would prevent this; and still be sufficient to allow the free passage of air. Much less height would render the space difficult to keep clean.

The section of Tollet's wards is very striking. It is practically a Gothic arch; and the centre is no less than 26 feet above the floor line. It provides an enormous volume of air in the ward; but inasmuch as experiments have shown that there is little movement in air of a room at a greater height than 12 feet, it seems excessive. An elliptical section rising to a height of 14 feet is effective; and I am told that the ward I built of that section at Charing Cross Hospital, is the best ventilated of all of them, and the one in which it is easiest to maintain an even temperature at all times. Obviously it prevents a violent deflection of the air entering the wards at the upper parts of the windows and ventilating inlets; and eases the passage of air up to the extract flues in the roof.

We will now consider the ward adjuncts.

Bath Rooms and Lavatories.

The position of bath rooms, lavatories, and conveniences varies in practice, but it is most usual to place what are quaintly called sanitary towers, at the extreme end of the wards jutting out at the corners. I do not think it an ideal position, because, for one thing, it is just at those points that we are able to get the most and best sunlight which these towers necessarily block out. These towers are separated by cross ventilated lobbies from the ward.

Mr. Aldwinckle, at the Brook Hospital, placed these offices in a tower leading out of the centre of the ward, and this plan has its advantages from some points of view; but on the whole it seems that a better position (especially in a short ward) is at the lower end of the ward adjoining the ward kitchens, etc. This leaves almost the outer wall surface and windows of the ward itself exposed to the sun without interruption.

It is most usual to place the baths in one of the towers, but this is, I venture to think, entirely unnecessary from a sanitary point of view; and they are more convenient placed adjoining the kitchen and offices. In this way it is possible to make the towers of small dimensions—a matter of great importance, in view of the obstruction they form to the light and air of other parts. For this reason too, and another, it is better to put the ward conveniences in one tower and the nurses' sink room in another. The other reason is that the nurses' work (at best not the most pleasant) is rendered easier and more agreeable. The special convenience for the use of nurses may also be well placed in the sink room tower. It should contain separate sinks respectively for emptying and cleaning bed pans without unnecessary handling; and also a long wide and shallow sink for washing mackintoshes. Also a small cupboard for preserving specimens of excreta for examination. This can be well placed in the thickness of the outer wall, and it should be thoroughly ventilated.

The air which is abstracted from the ward by open fires and flues must be replenished from the outside; and it will be drawn more freely through the openings which offer the least resistance to its passage. That may easily happen to be through the sanitary annexes; and it is of course the function of the cross ventilated lobby between the annexe and the ward to obviate this. Care must be taken that this lobby is not a mere flue between them, and that can only be done by making the passage of air in the lobbies easier than in the annexe. It is possible to make the extracting power of the annexe stronger than that in the wards, so that the draft is away from, rather than towards, the wards.

Although I do not propose to deal at any length with the question of ventilation, I must state the general principles as applied to wards, because it has a bearing on the particular form of the pavilion block.

In the first place, I think, it is not unknown that I abjure all forms of mechanical ventilation in hospital wards, and it is with no little satisfaction that I find that medical men as a rule are emphatic in their preference for what we call natural

ventilation. Ample and efficient ventilation can be secured in this country by means of open windows and air inlets.

In the treatment of consumption, it has been found that unlimited fresh air is one of the most important factors; and it is now recognized that it is equally valuable for every other disease. I think it is not too much to say that even the doubtful freshness and cleanliness of the air in cities is better in excess rather than in small quantities. In other words, have plenty of air in the wards, clean and fresh if you can, but it you cannot, at any rate have as much as you can of the best available supply. I am not suggesting that air is not best when cleansed of all dust and dirt, but until we can secure this, by more simple means than machinery and long dark flues, we are better off as we are.

In most mechanical schemes the engineer cannot resist the opportunity of combining the heating with ventilation, *i.e.*, by delivering the air into the wards warmed. Those who can enjoy and thrive in warm air love also sterilized water, and other lifeless things. The majority of us prefer and thrive better on air and water as nature supplies them.

In placing the windows directly opposite one another, we can at most times get a gentle flow of air from one side to the other. This is the case even on the stillest day; because the temperature on any one side of a building is always greater or less than on the others, and as we know movement of air is caused entirely by the differences in temperature.

In rough or cold weather, we have to rely more or less on the inlet flues which are placed—one to each bed—in the outer walls. They discharge into the ward about 3 to 4 feet below the ceiling level. A little air may also be introduced at the floor level, the inlets being so placed that it infringes on and is slightly warmed by the radiators or hot water pipes. This helps the general circulation of the air. An inlet or inlets may also be placed with advantage in connection with the central heating stoves.

Very important is the provision for extracting the foul air which is given off by the patients. The most powerful agent in this direction is the open stove, but strong extraction flues at the ceiling level are of equal importance, and an induced current is valuable.

The golden rule is to have plenty of air, fresh and cold, but not too cold for reasonable comfort, and to keep it gently moving.

Day Rooms.

Day rooms for patients cannot be considered essential, but they are desirable. They are most often placed adjoining the kitchen and separation wards where they can be kept under better observation by the staff. Much, however, may be said in favour of placing them at the extreme end of the ward where, with abundance of window space, they form veritable sun rooms. It is desirable that they should

have conveniences adjoining. In the Willesden Infirmary the day rooms are placed in this position, and the sanitary towers are so situated as to serve them as well as the sick wards

Scullery.

The ward kitchen or scullery is an essential part of the ward unit. It need not be large if the door and window fittings are conveniently placed. A deep sink is provided with drainer boards and plate rack. Also a small cooking stove—preferably a gas range—for keeping food hot.

Separation Rooms.

One or two small rooms are very desirable to accommodate noisy patients or those for whom absolute quiet is essential. In a large hospital it is usual to provide one such room for two patients and two for one each.

Linen Store, etc.

To complete the ward unit we require a linen store room, broom cupboard, patients own clothing room, and a small pantry.

For these, space can be economized by providing a small cupboard in the outer wall of the scullery for food storage; cupboards along one side of the passage leading to the ward for linen, etc., and a cupboard in the kitchen for brooms, pails, etc. I prefer that the latter should not be placed in a closed space at all. They can be neatly hung on the wall of the kitchen. Cupboards are so handy for hiding dirty things.

Patients' own clothes should however be placed in a small room fitted with steel lockers, pegs, etc.

Ward Sister's Room.

In large hospitals, a room is generally provided for the special use of the Ward Sister, but it should be in no sense a sitting or bed room. It should be more in the nature of an office.

The life of a nurse, as I have said, is very hard, and indeed only the strongest women can undertake it. Every consideration possible should be shown to them, and ample opportunity for rest and recreation, but not in or about the wards. We may hope one day to reduce their working hours to eight, and then we shall be able to employ many who have every virtue and capability for the work, but are now prevented from following the vocation by lack of the necessary physical strength.

Staircase and Lift.

If the ward block is of more than one storey, a staircase and lift is of course necessary.

The stairs should not be less than 4 feet in width and with an easy rise, say $6\frac{1}{2}$ inches with an 11 inch tread. No winders should be allowed.

The lift should be large enough to hold a bed and two nurses or attendants.

It is desirable that the staircase should be cut off by a corridor or cross ventilated lobby from the wards and adjuncts, so that the air from the lower ward may not be able to ascend to the one above.

Conclusion.

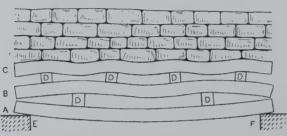
I fear I have treated this very large subject in a very inadequate manner, and in condensing my description, I have omitted many matters of importance, but I may at least claim this virtue for the shortness of my paper that it leaves time for discussion, which is after all the essence of these meetings. I may add that I shall be very glad to give any further information on points which may sufficiently interest you.

For the present, I will conclude by pointing out the special features of the plans I exhibit, many of which have been lent me this evening by distinguished architects who have made a special study of these institutions, and for whose co-operation in this way we owe our cordial thanks.

Review.

Flat Sheet Rolling. A description of the principles of an invention shewing a method of obviating deflection in beams carrying an equally or unequally distributed load. By W. Löve, 42, Claremont Square, N.

Mr. W. Love has invented a system of supports for long rollers, which, being mechanically simple and based upon sound scientific principles, is likely to prove very useful in machines for rolling large sheets of thin plates of metal, vulcanite, etc. He also suggests the same means for use with bressummers to avoid the deflection caused by the weight of brickwork or masonry above them when supported at the ends only, but we do not see the slightest chance of its adoption for this purpose. The proposal is virtually to use three superimposed beams instead of the customary single one; distance pieces to transmit the pressure being inserted as shown greatly exaggerated in the accompanying figure, where A, B and C are the three beams required, D the



Exaggerated View of Love's Method of Reducing Deflection of Supporting Surface

distance pieces or separators for transmitting the load, and E, F, the ordinary templates carrying each end of beam. It will be seen that owing to the shorter spans into which the upper beams are divided the deflection will be less and will be broken up into uniform portions, whereas, resting on the lower beam only the deflection would be greatly increased towards the centre.

The Annual Dinner.

THE Twenty-seventh Annual Dinner of The Society of Architects, which was held on April 28th, 1911, at the Holborn Restaurant, was one of the most successful functions of the kind which have been held.

Mr. Geo. E. Bond, J.P. (President), was in the Chair, and was supported by a record gathering of members, the seating capacity of the Venetian Room being tested to its utmost limit by an attendance of some two hundred and thirty members and guests. Amongst those present were the following:

Mr. A. S. E. Ackermann, B.Sc. (Secretary, Society of Engineers); Prof. Henry Adams, M.INST.C.E. (Chairman of the Examination Committee); Mr. W. Atkinson, Mr. Thos. Baines (Hon. Solicitor); Mr. W. Balmain, Mr. W. Banks, A.M.INST.C.E. (City Surveyor, Rochester); Mr. R. Banks-Martin, Mr. R. Geo. Bare (Past Hon. Librarian); Mr. E. E. Barks, Mr. R. D. Batchelor, J.P., Mr. Ernest Beal, Mr. E. C. Beaumont, Mr. A. D. Bell, Mr. E. A. Billinghurst, c.c., Mr. G. A. Birkenhead (Member of Council) Cardiff; Mr. H. C. W. Blyth, Lowestoft; Mr. Geo. E. Bond, J.P. (President); Mr. H. Yolland Boreham, Mr. A. Montefiore Brice, Mr. A. J. Brickwell. Mr. Geo. Soudon Bridgman (Past Vice-President) Paignton; Mr. R. E. Brinkworth, F.S.I., Bath; Mr. Andrew Brown, Mr. W. Brown, Mr. C. McArthur Butler, F.C.I.S. Secretary), Mr. John Butters, Ludlow; Mr. T. J. Byrne, A.R.I.B.A., Dublin; Mr. H. C. Chevalier, Mr. H. T. Chidgey, Mr. G. H. Child, Mr. Max Clarke, F.R.1.B.A., Mr. A. O. Collard, F.R.I.B.A., Mr. Philip Condy, Mr. L. A. Cooper, Mr. H. T. Cover, Mr. A. W. S. Cross, F.R.I.B.A. (Vice-President, R.I.B.A.); Mr. P. Crumley, M.P., J.P., Mr. W. Cuckney (Borough Accountant, Chatham); Mr. R. H. Cunliffe, Mr. S. Everard Davies, Mr. C. Day (Borough Surveyor, Chatham); Mr. Walter Dewes, Major H. P. Tavener Dickins, v.D. (Master of the Tylers' and Bricklayers' Company); Mr. Geo. Dickens-Lewis (Local Hon. Secretary), Aberystwith; Mr. D. G. Driver, F.C.1.S. (Secretary, the Architectural Association); Rev. W. B. Driver, Mr. Chas. Dunch, Mr. R. Cromwell Edwards, Mr. F. J. Eedle, Mr. G. Ellson, Mr. C. W. English, Mr. Wm. Egerton, Erith; Alderman J. R. Featherby, J.P., Mr. Fred. Fenning, Mr. Fredk. Fenton, M.A., Mr. Frank J. Fisher, Mr. Edward Forshaw, Burtonon-Trent; Mr. F. Foster, Mr. W. F. Foster, Mr. P. M. Fraser, Mr. H. Freyberg, F.S.I., Mr. W. S. Frith, Mr. George Fryer, Mr. Matt. Garbutt, F.R.I.B.A., Mr. J. S. Gibson, F.R.I.B.A., Mr. G. Bird Godson (President of the Master Builders' Association); Mr. T. R. Greig, Mr. Edwin T. Hall, F.R.I.B.A. (Past Vice-President, R.I.B.A.); Mr. E. J. Hamilton (Past President) Brighton; Mr. W. J. Hardcastle, F.R.I.B.A. (President of the District Surveyors' Association); Mr. Henry T. Hare, F.R.I.B.A., Mr. A. Harris, Mr. A. W. Hart, Mr. W. Hart, Mr. W. H. Hattrell, Coventry; Mr. P. G. Hayward, Mr. J. B. Hibbert, F.S.I., Mr. H. C. R. Hide, Mr. E. F. Hill, Mr. H. W. Hillier, Mr. G. F. Hohler, K.C., M.P., Mr. J. S. Holliday (President of the Institute of Builders); Mr. T. Hooper, Mr. Geo. Hubbard, F.R.I.B.A., Mr. A. A. Hudson, K.C., Hon. Member, (President of the Tribunal of Appeal); Mr. T. S. Inglis, Mr. R. A. Jack (Member of Council); Mr. Charles E. Jackson, Mr. M. T. E. Jackson, Mr. T. E. Lidiard James, F.R.I.B.A., Mr. J. Jellis, Mr. J. Gwyn P. Jepps, Mr. L. A. Atherley Jones, K.C., M.P. (Hon. Member); Mr. Arthur Keen, F.R.I.B.A. (President of the Architectural Association); Mr. A. A. Kekwick, Mr. H. H. Kekwick, Mr. W. E. Kekwick, Mr. J. W. J. Kennedy (Master of the Painters' Company); Mr. E. J. Kibblewhite, Mr. J. A. King, Mr. J. Wolf King, Mr. A. E. Kingwell, Mr. Edmund Kirby, Mr. Hans Kohler, Mr. D. A. Langdon, Mr. H. Lavington, Mr. E. Maxwell Lawford, Mr. A. Leoni, Col. F. S. Leslie, R.E. (Honorary Secretary and Past Vice-President); Mr. G. H. Leavey, Mr. Sivori Levey, Mr. A. S. R. Ley,

Mr. R. B. Ling, Mr. R. G. Lovell (Member of Council) Eastbourne: Mr. R. A. Low, Mr. W. H. H. Lunn, Mr. Ian MacAlister, B.A. (Secretary, R.I.B.A.); Mr. W. Mackay, Mr. Percy MacQuoid, Mr. R. Mann, Mr. A. Martin, Mr. Ellis Marsland (Hon. Auditor and Past Hon. Secretary); Mr. Sidney Marsland, Mr. Spencer Marsland, Mr. C. Mason, Mr. G. H. Mather, Mr. Herbert W. Matthews, Mr. W. H. May (Past President, Devon and Exeter Society of Architects); Mr. A. Y. Mayell, Mr. J. N. K. McKilliam, Mr. A. Meakin, Mr. Henry Metcalf, Mr. R. Metcalf, Mr. S. H. Meyers, Mr. G. A. T. Middleton, A.R.I.B.A. (Past Vice-President); Mr. H. V. Milnes-Emerson, A.R.I.B.A. (Chairman of the Students' Section); Mr. E. C. P. Monson, F.R.I.B.A. (Chairman of the Practice Committee); Mr. H. C. H. Monson, Mr. A. W. Moore, F.R.I.B.A., Mr. J. T. Munday, Mr. G. Neaves, Mr. John Nolon, Mr. A. R. Norman, Mr. W. C. Northcott, Mr. H. Oliver, Mr. A. W. Osborn, Mr. Geo, H. Paine, Mr. H. Palmer, Mr. W. G. G. Palmer, Mr. T. H. Nowell Parr. Mr. Henry Parsons, Mr. Edward I. Partridge, F.S.I., Mr. W. Phillips, Mr. R. B. Pilcher, F.C.I.s. (Secretary, the Institute of Chemistry); Mr. J. H. Pitt, Mr. Horatio Porter, M.A., A.R.I.B.A. (Mayor of Holborn); Mr. Albert E. Pridmore, F.S.I. (Past President); Mr. R. G. Pridmore, Mr. J. Presnail, Mr. Ed. Procter, Alderman W. E. R. Randall (Mayor of Chatham); Mr. H. Cartwright Reid (Superintending C.E., H.M. Dockyard, Chatham); His Honour Judge Rentoul, LL.D.; Sir George Riddell (Hon. Member); Mr. W. H. Robinson, Whitstable; Mr. A. W. Roques, Mr. C. Rowley, Mr. Edwin J. Sadgrove, F.R.I.B.A. (Hon. Treasurer); Mr. Arthur H. Salisbury, Mr. M. T. Saunders, Mr. Anthony Scott (Local Hon. Secretary) Dublin; Mr. A. Alban H. Scott, Mr. A. C. Scott, Prof. W. A. Scott, A.R.I.B.A., Dublin; Mr. Fredk. W. Shenton, Mr. H. Shepherd, A.R.I.B.A., Alderman C. E. Skinner, Mr. S. C. Skinner, Mr. Henry C. Smart, Mr. Henry Smith, Mr. J. Llewellin Smith (Local Hon. Secretary), Aberdare; Mr. J. Spurling, Mr. Leonard Stokes, F.R.I.B.A. (President of the R.I.B.A.); Mr. John Stovell, Mr. Walter W. Thomas, J.P. (Past President), Liverpool; Mr. J. Thompson, Mr. H. Guicharde Todd, F.S.A. (Scot.); Mr. G. Trotman, Mr. Percy B. Tubbs, F.R.I.B.A. (Vice-President); Mr. B. R. Tucker (Past Hon. Treasurer); Mr. C. Tuff, J.P., c.C., Mr. Leslie R. Vigers, F.S.I. (President of the Surveyors' Institution); Mr. Thos. Wallis, Mr. William E. Wanmer (Assistant Secretary); Mr. Frank C. Warren, Mr. Chas. Watkins, Mr. W. H. Webber, Mr. Edward White, J.P. (Chairman of the London County Council); Mr. V. Wilkins, Mr. H. A. Wilkinson, Mr. Walter C. Williams, Alderman Chas. Willis (Deputy-Mayor of Rochester); Mr. Richard Willock, F.R.I.B.A. (Member of Council), Mr. B. Willson, Mr. Francis H. Witts, Alderman H. F. Whyman, c.c., Mr. A. Young.

The loyal toasts having been duly honoured, his Honour Judge Rentoul proposed "The Houses of Parliament," referring in his usual genial and humorous manner to his former connection with the House of Commons and his long friendship with Mr. Atherley Jones. Having dealt with some of the problems and difficulties which beset members of Parliament, Judge Rentoul said, it was to him at any rate a very pleasant thing to feel that the two Houses of Parliament with His Majesty the King at the head, so to speak, ruled over at the present moment a United Empire and a United Kingdom. Difficulties had existed in the past between the three countries, but all that had been forgotten. The Greeks of old represented the Goddess of Beauty rising from the ocean waves and so after the wars of England and Scotland a beautiful bond of brotherhood arose more than a century ago, and so in like mind he looked forward to the day when the same bond of brotherhood shall be felt between the whole of the inhabitants of Ireland, when in point of fact, the same goddess of Beauty should reign, when from the Shannon in Ireland to the Severn

in England the same Deity of peace and brotherhood might yet arise, with common interests, common longings, mutual desires for British glory, all united in one practical brotherhood, under the same Sovereign.

MR. L. A. ATHERLEY JONES, K.C., M.P. (Hon, Member), in responding, said he had represented one constituency for twenty-six years and recognized that although there was a great cleavage between parties, there was one generous and general bond of sympathy between them in that they were all animated by a desire to serve the general interests of the State, and thus it was that those present were prepared to participate in rendering homage to that great institution which had stood the storm of many generations. This was not the first time that he had been present at the Society's annual gatherings. He was told that the shadow of approaching dissolution rested over the body whose hospitality he had so frequently enjoyed. There was always a certain tinge of melancholy in the submerging of one's own personality in the personality of another, but he was consoled by the reflection that those who represented the older body would gather new force, new strength, new vitality from the accession of the more recent body, and on the other hand those who belonged to the more modern institution. The Society of Architects, would better serve the cause of the great art which they represented. They must not forget the great cause with which they were associated but continue to bring to bear the enthusiasm which appertains necessarily to the more modernly created. They must take the transition from their present state to another as an assurance that the interests of their great art would be carefully guarded, preserved, encouraged and stimulated, and when they met again in their new character look back with pride and satisfaction on the work of the Society.

MR. ARTHUR KEEN, F.R.I.B.A. (President of the Architectural Association) in proposing the toast of "The Society of Architects," said he was placed at the outset in a difficult position from more points of view than one. In the first place, how was it possible for him to wish long life and prosperity to a Society which had decided to terminate its career. His other difficulty was that the Society was formed originally and has existed to give practical effect to the policy of Registration, with which he was not in agreement. He had never been able to see how the best interests of the artistic side of architecture were to be served by this policy of Registration. In spite of this he had accepted their invitation to be present and to propose that toast. He hoped they would not think too hardly of him for it. It had been stated that evening that this was essentially a democratic country and so it was, and the wish of the great majority of the architects was that some Bill should be brought in to give effect to the policy of Registration, and recognizing that, he had to fall into line with the rest. He had the honour of representing an Association which existed for educational purposes and anything which tended to raise the standard of education appealed to him very strongly. There were many aspects

from which Registration might be looked at. Its possibilities in regard to raising the standard of education were those which appealed to him. The Institute recognizing what was coming had adopted the policy of linking up with itself a very large number of architects throughout the length and breadth of the country who had formerly stood aloof from it and perhaps taken little or no interest in its affairs, and by the absorption of the Society the Institute would increase its numbers and strengthen its position. At the same time the Royal Institute was turning its attention very seriously to educational questions, and he looked forward to the time when all educational facilities would be carried on with the strongest support and to a great extent under the direction of the Royal Institute. In London and in some of the large provincial towns they had given up the old method of apprenticeship and sent the young men to a school of architecture. It was obvious that this system could not be adopted except in large towns, and it was from the educational aspect that he believed Registration would have a very beneficial effect. He would meet his first difficulty, that of proposing the health of a Society which had almost ceased to exist by making his toast apply to the individual Members. He wished them "health, long life, prosperity and great success." There was another view and that was that in the order of nature nothing ever died-things changed their form, and new combinations served new purposes, but they did not go out of existence. They would no longer hear of The Society of Architects but the vitality and the force which had distinguished that body from its commencement to the present time were about to be incorporated in an older body which would benefit exceedingly by the addition. The Institute was an old body if not a very active one; there were plenty of outlets for its energy, and the support received from the Society would be most valuable to it in every possible way. He hoped that members of the Society would never have occasion to regret the step which they were now taking, but that they would find new interests and new outlets for enthusiasm, and that the result of their united efforts would be the raising of the art of architecture to a higher position than it holds at the present time, a position which rightly belonged to the Mistress of all the Arts.

Mr. George E. Bond, in reply, said the year which had elapsed since their last Annual Dinner had been the most successful one in the Society's history for no fewer than one hundred and sixty-seven new names had been added to the roll. It had in other ways been a most eventful year, for in September last they took possession of their new premises in Bedford Square, upon which they had expended a large sum of money in adapting them to suit their special requirements, but by an irony of fate, just at the moment when they had established themselves in a home of their own, a scheme was initiated which would if successfully carried through effect a great and historic change not only with regard to the Society but the profession generally. For more than a quarter of a century the Society had devoted

its energies to educating the general body of the profession to a just appreciation of the benefits which would accrue to themselves and to the general public as a result of a successful passage through the Houses of Parliament of "The Architects Registration Bill," and now for the first time in their history there appeared to be a reasonable prospect of an agreement between all sections of the profession as to the form in which such a Bill should be presented. The Society had always consistently expressed the opinion that it was the duty of the R.I.B.A. to take up the question, and to promote such a Bill, and an arrangement had been arrived at whereby the Royal Institute would in future take the lead in this movement and be loyally supported by The Society of Architects.

The Members of their Registration Sub-Committee, who had been responsible for the conduct of the negotiations with the Royal Institute, knowing that in the present conjected state of public business the ultimate success of their aims and objects could only be secured, by the presentation of a Bill, backed by the unanimous voice of every section of the profession, entered upon their task with a determination to do everything in their power to facilitate an amicable and honourable settlement. They were met in a similar spirit by the representatives of the Royal Institute, the result being that the general principles of a satisfactory Bill had been mutually agreed. The question then arose why should two distinct and separate associations continue to exist having exactly the same aims and objects, and covering exactly the same ground, that is to say every part of their great Empire. So the possibility of unity was discussed, and as they at once recognized that with the Royal Institute fully committed to the promotion of a Registration Bill, the raison d'être of the Society's separate existence had disappeared, and also that the grand ideal of a united profession could be the better attained under one powerful and representative Institution. The question immediately resolved itself into one of terms and conditions, the chief difficulty they had to face, being, how could a Society whose membership was based on an equality of status, enter bodily into another association composed of three distinct classes? Various proposals were considered and discussed. and ultimately a fair and reasonable scheme was agreed to by both parties subject to the approval of the Councils and members of the respective associations. Such approval had been obtained, and the scheme provisionally ratified, so that after many years, there now appeared to be every prospect of their differences being settled to the satisfaction of all concerned. But assuming for the moment that all their internal differences were settled, and that from the Architect's point of view a reasonable Bill was propared for submission to Parliament, public interests had still to be considered, for it was only in so far as it would be to the general welfare of the community at large as well as to themselves that such a Bill could be justified, or that they could reasonably expect Parliament to approve it. Under existing conditions the public suffered enormously in health and pocket as a result of the

employment of ignorant and unqualified practitioners, and further their senses were offended by the erection of ugly abortions in their streets and public places. He referred not only to the nondescripts who combined the practice of architecture with sundry other trades and callings, but also to the irresponsible and thoughtless young men who had duly served their three or four years of articles in the offices of qualified architects, performing all their routine duties as part of the day's work, but who had never interfered with their sports or pleasures by seriously applying themselves to the task of acquiring a practical knowledge of the multifarious duties pertaining to the practice of this most exacting profession, and who as a consequence brought upon it great discredit in the eyes of the public.

Therefore in the interests of the public, test examinations on sound practical lines must be applied to all future candidates for admission to the ranks of the profession, each must show that he is in possession of a sound practical knowledge of the science of construction, and of the nature, qualities and capabilities of all kinds of building materials. As a draughtsman he must be able so to express his ideas with pencil and paper, that they may be readily understood by any reasonable workman, he must be able to draft a clear and intelligible specification, and his legal knowledge should be sufficient to enable him to frame proper terms and conditions of contract, and to safeguard his clients' interests with regard to rights of light and other easements, building lines, party-walls, rights of support, rights of adjoining owners and others, and a score of other items, which, if neglected, might involve his client in expensive litigation. These were all practical qualifications, closely associated with the interests of the public, and which could and must be made the subjects of severe examination tests.

But a person might possess all these qualifications and still have no real claim to the title of architect, for there was another essential qualification, he must be an artist, actuated by an artist's motives, and in possession of an artist's ideals, having a due sense of proportion and harmony and a mind fully tuned to a conception of the true and the beautiful. It was in connection with this art qualification that the real difficulty occured with regard to test examinations in architecture; these, he suggested, ought to be simple and to the point, for necessarily the early art training of an architect, must be on conventional lines, and they might safely assume if a candidate possessed a sound knowledge of the principles of his art, and of the distinguishing characteristics of the orders and styles, that although he might not have very original ideas, his subsequent work would be of such a character as would satisfy all reasonable requirements, and in fairness to the candidate that was as far as an art examination test ought to go. As works coming within the scope of architectural practice were endless in their variety and of all shades of importance, every candidate after proving his qualifications up to this point might safely be left to find his own level, for from the point of view of the client it was of far greater

importance that his architect should be able to distinguish between different kinds and qualities of materials than that he should be able to give the approximate date of erection, say, of the Temple of Diana at Ephesus; nor would the ability to recite in chronological order, the names and chief works of the great classical architects, compensate for any lack of knowledge with regard to the latest developments in Sanitary Science; but having once earned the right to practice architecture, he could then add to his other qualifications the trimmings and embroideries of pure culture, with advantage to himself and to all those with whom he might come in contact, and although he would now be relieved from further compulsory examinations his student days were not over, but instead of the subjects of study being arbitrarily dictated by examining boards he would be free to follow his own tastes and develop along lines most congenial to himself; he might look upon architecture as an archæological study, or treat it as a living art, which like all other living things, had followed certain definite lines of evolution, determined by environment, and which was capable of still further progress and development.

In bringing his remarks to a close, the President referred to the imminent dissolution of old associations, the severing of old ties, the abandonment of oldestablished habits and customs and the burying of old idols. He had been a member of the Society some twenty-three years, the last thirteen or fourteen of which had been spent in close association with its management. He could therefore speak from personal knowledge of the harmonious relations which had at all times existed between the Council and Officers and the general body of Members, from whom he had received the greatest consideration and kindness. Ouite probably this might be the last time a President of the Society would have the opportunity of addressing his fellow members on an occasion of that kind, for the end was in sight and they must ask themselves whether the change was going to be for better or for worse, were they going forward into the light or dropping back into obscurity. Personally, he was full of hope, for having perfect faith in the wisdom of the suggested new arrangements, he was confident that when they ceased to exist as a Society, an immediate resurrection would follow to a new life in the Parent Institute, where they would have full scope for their individual energies and activities, and where, he was sure they would continue to do good and useful work in the cause of Registration. The future was in the lap of the Gods. Sophocles said, "Call no man happy till he is dead, for we cannot know by what wiles the Gods will betray fortune and virtue," the moral contained in those words was applicable to his case, for it might be, that the disembodied spirit of the unfortunate Cassandra had entered the bodies of one or two prophets among them, who predicted that they were extremely unwise in burning their boats before they had reached their ultimate goal, that is before a Registration Act was an accomplished fact, and should the Gods betray their fortune to that extent, he would be remembered deservedly as a chief among wreckers,

but in either case, he asked his fellow-members to give him credit for the best intentions, for throughout the negotiations he had acted conscientiously according to the light within him, desiring before all things to maintain the honour and to promote the truest and best interests of all sections and all grades in a great and noble profession.

MR, E. J. HAMILTON, (Past President), in proposing the toast of "The Royal Institute of British Architects," said that this was the first time that they had officially had the pleasure of entertaining the representatives of the Royal Institute of British Architects, though they always had members of the Institute at their dinners in in their capacity of members of the Society. The interests of the two bodies had always been kindred although they had been working apart, and whilst as regards Registration they had for a long time as a Society viewed things from a very dffferent standpoint from that held by the Royal Institute, in the main there had been many things upon which they had united, as for instance, the important matter of competitions, ancient lights, the Metropolitan Building Act, and things of that kind. and quite recently in connection with the important matter of copyright in architecture. But as had been frequently pointed out, the Society, whilst it had engaged in many useful functions, had throughout its career set itself mainly towards one object, namely, the placing of the profession on a similar footing to the Legal and the Medical. There were one or two main principles upon which the principles of Registration rested, Mr. Keen had spoken of Architecture as an Art, but it was the art of practical building and that being so it stood in a very different position, for instance, from painting or sculpture. The work of the painter or sculptor if it was unmeritorious could be consigned to oblivion, whereas, the work of an Architect, the art which he put in a very permanent form, had to stand probably for many years, and since people lived in the creations of his art and occupied his buildings it was of the utmost importance that architects should be trained not only in the history of their art, but in the science also. The general public did not, unfortunately, care very much about art, and one was hopeful that when architecture was put on a fairer basis and it was shown by legislation that the architectural profession respected itself and its work, then the public might come to appreciate their art more than they had done in the past. The principle of Registration had been practically admitted from the very earliest days of the existence of the Royal Institute, for in the year 1859-60 the Institute passed a very important resolution admitting this principle, and this had gradually developed. Without any invidious comparisons between those who then had the management of affairs and the leaders of the Institute at the present-day, one must, he thought, admit that the bump of caution was very largely developed in those days and it was therefore not surprising that after twenty-four years from the passing of that resolution some of the younger members of the profession should have felt the need for another

Society and the formation of The Society of Architects followed. But if in those earlier days men holding the wide views of Mr. Leonard Stokes, and those who now formed the leading Members of the Council of the Royal Institute had had the conduct of affairs, in all probability there never would have been a Society of Architects. Some little misunderstanding arose at one period of the Society's existence when they instituted examinations for Membership. He was in the Chair at the time and he contended that their object was not in any sense antagonistic to any other body, but was merely to ensure efficiency in their own Members, and the recent development which had taken place had proved that they were perfectly sincere in their expressions at that time. Some four years ago the Royal Institute definitely decided upon a practical scheme of Registration, and he thought it must be admitted that it was only by mutually working in this matter that they could possibly secure the ear of Parliament, or of the public, and there can be a chance of a Bill coming into force. They had to thank their President and the Committee to whom this important matter was delegated for the initiation of this scheme of unity, and they felt that on both sides there had been very great skill shown in getting over difficulties. This was not the first time that the Royal Institute had absorbed into itself another body. A few years after it started it absorbed a previously existing society called "The Architectural Society." He believed the union would be for the best interests of both bodies and for the public at large, and that it would lead to an addition of strength to the Royal Institute, and also give an immense impetus to the great cause of Registration which they all had so much at

MR. LEONARD STOKES (President of the R.I.B.A.), who received an ovation on rising, said it had been pointed out that this was the first occasion on which a President of the Royal Institute had been present at one of the Society's dinners. His only regret was that he was afraid it might be the last. The next best thing, however, was for them all to come and have an architectural dinner which would embrace both Societies. He realized that it was very difficult to have two societies and two Presidents both reporting progress on one evening, and he humorously suggested that Mr. Bond might continue to be President, and that he ought to relinquish that office, for after his eloquence that night the Chairman was obviously the better man for the post. The Society's President had let fall one or two words not altogether hopeful of the future, but he thought he might throw all his doubts to one side, for if there was any honour in the Royal Institute it would be shown to the Society in this matter. He must ask them to excuse him from speaking at any length as he was under the doctor's orders to have a perfect rest cure. He much appreciated the way they had received the toast.

MR. G. A. T. MIDDLETON, A.R.I.B.A., (Past Vice-President), in proposing "The Visitors," said it had fallen to his lot to propose probably the last toast ever to be

given at any great meeting of The Society of Architects. He was one of those who took part in the formation of that body, consequently his memory went back to many similar meetings. Through the whole of their career they had entertained guests largely, from the Conversazione which was held in the Floral Hall in 1885, right up to the present time. Those guests had been most welcome and the Society had received from them much encouragement in that great movement which the coming state of affairs would carry forward to success. Those who had only heard the speeches that night would recognize that the oratory had always been of a high standard. They could look back to the time when Dean Farrar, Sir Francis Jeune, and others were heard at their gatherings, and also the late Lord Monkswell, who was to have taken their Bill into the House of Lords. They had gained still further encouragement that night and not the least from the few words of the President of the Royal Institute when he said that "if there was any honour in the Royal Institute, that which the Society were joining them for would be carried out." He coupled with the toast the names of Mr. Edward White, the Chairman of the London County Council, and Mr. Leslie Vigers, the President of the Surveyors' Institution.

MR. EDWARD WHITE, J.P. (Chairman of the London County Council), said he had heard the claims of their profession in the matter of Registration very fully set out, and while listening to their President he was wondering whether the registration of competent persons should finish with the Registration of Architects, and he suggested to his friend Mr. Atherley Jones that it might be of great advantage to the country at large if candidates for Parliamentary honours should also have to undergo a test, and to submit some proof of their suitability to become legislators. He dreaded to think what might be the result if registration was enforced upon the Members of the London County Council, and particularly on the Chairman of that body, who he feared would not have had the pleasure of being with them that night if he had had to submit to such an examination. He supposed it would be a good thing that there should be this Registration of Architects, and he should watch with interest the development of the movement, because the County Council insisted upon the very careful examination of those members of their profession who sought to become District Surveyors, greatly he hoped to the advantage of the public who had to expend their money in buildings. Having been a member of the Building Act Committee for about sixteen or seventeen years he had seen a good deal of the work of their profession that had to be submitted to that Committee for their approval, or for their sanction to the proposals of those who desired in any way to deviate from the complicated conditions of the London Building Act. It had often occurred to him to make the suggestion that it would save a considerable amount of time if architects before proceeding too far with any of their building schemes involving application to the Council, would go to the District Surveyor in their division and explain what they wished to do. It would often save them having

their scheme rejected when they came before the Committee. There was a time in his early experience when eighty or ninety per cent. of the applications were refused because in some slight matter they did not conform to all the regulations of the Building Act, and did not succeed in passing the officials who had to direct the Committee. A better condition of things, however, prevailed to-day, and where there were slight difficulties to be dealt with the Committee instructed the Superintending Architect to see the Architect so that the plans might be amended, and thus there was a saving of time and labour.

They knew something about architectural work on the County Council, and he might call himself one of a firm of Architects undertaking more work than any other single firm in London, because they had an architectural staff numbering between four and five hundred, so they could imagine what an enormous amount of architectural work had to be done by the London County Council. Those present would doubtless think that a great deal of that work might be distributed amongst architects. He had always been a strong opponent of Municipal trading, and he thought some good might be done by getting a larger number of ideas than was possible when the work was restricted to a department ruled by one head. He thanked them for the opportunity of attending that function which was, perhaps, the last public gathering of their Society. He had no doubt they would blossom out into a much larger and more important organization when they became affiliated to the Royal Institute.

Mr. Leslie Vigers, F.S.I., (President of the Surveyors' Institution), in tendering on behalf of his profession their thanks, said it was the first time he had heard of the suggested amalgamation with the Royal Institute. He thought the fewer societies or institutions divided up amongst one profession the better. He represented an Institution whose scope covered the whole of the United Kingdom, including Scotland and Ireland, and they had a large number of members in the Colonies. At the invitation of the Colonial office at the beginning of next month they were holding a conference of the Surveyors-General of the Colonies in their Institution, to try and arrive at a common basis of examination for members in the Colonies and Members in this Country, so that they could practice in either the home country or in the Colonies as fully qualified Surveyors. With regard to the question of examination, he was certain that they would all—especially the younger men—thoroughly appreciate the advantages of the technical knowledge which they gained before entering upon their profession and getting that more mature knowledge which could only come by time.

The toast list was interspersed with an excellent programme of music provided by Miss Edith Kirkwood, Miss Hilda Campbell, Mr. Alfred Heather and Mr. Sivori Levey, whose impromptu topical musical recitation was much appreciated. The accompanyist was Mr. Alfred Pembery.

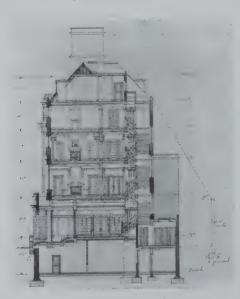
Travelling Studentship, 1911.

The subject set for the design competition this year was a Social Club, to be erected on a given site, having due regard to the existing buildings and ancient lights, etc., and the limit of height of the outer walls. The accommodation required was stated, the disposition of the rooms, the materials to be used and the style to be adopted being left to the competitors. The problem was to provide the most suitable accommodation at the least possible cost, while complying in every respect with local building by-laws.

The response was not anything like so large as in previous years, the subject apparently being too advanced for the average student.

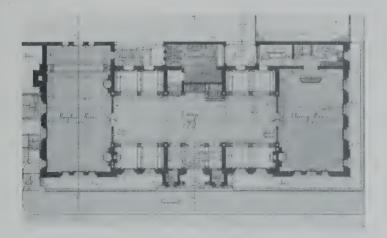
Five sets of designs have been received and adjudicated upon with the result that the Council have awarded the Travelling Studentship to Mr. J. R. Leathart, of 35, Canterbury Road, Brixton, S.W., an assistant in the office of Mr. Ralph Knott, the Architect of the London County Hall. Mr. Leathart, who is twenty years of age, was elected a Student of the Society in 1908, having previously won the Society's Architectural Scholarship, which he has held for three years.

A reproduction of part of Mr. Leathart's design accompanies this notice, and the whole of the designs will be on view at the Society's offices during the week commencing June 5th.



DESIGN No. 2. SECTION.

No. 2, the design to which the Studentship has been awarded, is the only one which shows a thoroughly architectural appreciation of the subject, both in plan and elevation. The plan is particularly good. It is axial both longitudinally and transversely and admirably lighted on every floor, while every detail of the requirements appears to have been thought out with the greatest care. The lounge hall on the ground floor, with its staircase rising opposite to the entrance and recesses on either side for a private conversation with guests, would form a delightful apartment and a dignified entrance to the building, having the reception room at one end of it and the dining room at the other. The dining room is well served both by a secondary staircase and with lifts from the kitchens below. Even such a minor point as a serving screen with table behind it has met with consideration.



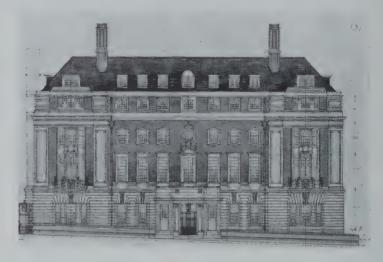
DESIGN No. 2. GROUND PLAN.

The satisfactory placing of the porter's room and the telephone box is also to be noticed. In the basement the kitchens are planned with obvious knowledge of their requirements, and a staff and goods entrance is provided with a goods hoist to a yard on the ground floor level. The upper floors are all reached by primary and secondary staircases and also by lifts, the first and second floors having handsome corridors with proper lavatories and steward's rooms, and excellent means of access to the various club rooms, combined with good service. The only fault which can be reasonably found with the scheme is that the Secretary's office and Committee room have been placed on the same floor as the members' bedrooms, but it is difficult to see how this could have been avoided. It is a distinctly good feature that these bedrooms are located on one floor, while the servants' rooms occupy that which is above, the rooms for the men and for the women servants being perfectly distinct, the one set under the control of the chef and steward and the other supervised by the housekeeper.

The elevation is perhaps a trifle lacking in dignity and follows too much certain modern eccentricities, while the second floor windows would be of awkward shape for practical use; at the same time they are eminently decorative and the scheme shows balance and a true appreciation of architectural composition combined with considerable skill in design, particularly in the ironwork. The detail sheet is to be highly commended, but the perspective is harsh and the view has been taken from too near to the building, with the apparent idea of keeping the vanishing points

within the limits of the drawing board. A more distant point of view resulting from the use of the centrolinead would have produced a better effect.

The building would not be an extravagant one to erect considering its class. Unfortunately the conditions stated that it should be erected at the least possible



DESIGN NO. 2. MAIN ELEVATION.

cost and some competitors seem to have imagined that this meant the production of something unreasonably cheap, but necessarily such a condition must be read with general reference to the style of building contemplated.

No. 1. The principal fault to be found with No. 1 is that the scheme is hardly of a sufficiently architectural character. Both plan and elevation suggests rather a block of flats than a dignified social club in a large town. The fault is a common one with English students, who are rarely taught in their early years to commence their work by laying down an axis. The plan is, otherwise considered, convenient, though the location of the entrance and its lounge hall, which is unduly small, at one end of the site, necessitates a considerable distance of corridor being traversed before the rooms at the other end are reached. The service is well contrived, but it is a pity that the members' bedrooms should occupy two different floors, and that some of them should be placed on the fourth floor together with the rooms for the servants: a most undesirable arrangement. The same remark applies to the juxtaposition of the dormitories for male and female servants, and the location of the women's bathroom in such a position that any users thereof would be almost certain to come into contact with men servants who may be simultaneously using their bathroom. Any dignity that the elevation might have possessed is lost by introducing a canted corner which has the further disadvantage of presenting structural difficulties where the thrust from the hip has to be met.

No. 3 has failed to rise to the subject. He has apparently little idea of what dignity means, while he uses long and narrow corridors, cramped and ill-lighted, and divides his rooms into small segments. It looks as though it is the elementary work of one accustomed to planning flats while regardless of waste space, and belongs altogether to the category of "building" rather than "architecture." The elevations are ill-proportioned and full of incongruities such as one often sees in stucco on the "front" of a seaside town, indicating bad training from the outset.

No. 4 is to be credited with neat but utterly ineffectual draughtsmanship, unfortunately wedded to a bad plan and a worse design. It is to be hoped that the author of this set has not advanced too far to begin again at the beginning by going through a regular course at a good architectural school. The only good feature is the entrance doorway, but the author obviously possesses patience and skill as a draughtsman and probably only needs good training to do good work.

No. 5 is probably the best scheme submitted, with the exception of that to which the Studentship has been awarded. But however good it might be in other respects it is unfortunately disqualified by two front gables being erected above the angle of 45 degrees, taken 57 feet above the street level, within which the roofs had to be confined. It is doubtful, too, whether the heavy projecting gables would look well in execution, though in the elevation they give balance to a scheme which otherwise is far too domestic and commonplace. On the other hand, the plan has a great deal to commend it with its central entrance, satisfactory lounge hall, reasonable corridors and well placed rooms on all floors, including the basement which is easily reached and served. The simple arrangement of the basement is particularly good. It is certainly convenient that the Committee room and Secretary's office should be located on the first floor. This too, is the only scheme except the successful one which shows an external emergency staircase for use in case of fire, and which really arranges the staff and members' bedrooms properly.

Matters Held Over.

Owing to considerations of space we are compelled to hold over the account of the members' visit to Lambeth Palace, on which we hope to have an illustrated article in the next issue, and also other items of interest, including a description of a town planning tour in Germany.

The Qualifying Examination for Membership.

At the Examination held in London, Manchester, Leeds, Oxford and Cardiff, on April 11th, 12th and 13th, the following candidates satisfied the examiners: E. Cavanagh, 2, Selwyn Road, Upton Manor, E.; T. H. Lighbody, 10, Risingholme Road, Wealdstone, N.W.; H. Pascoe, 67, Leicester Place, Leeds; S. G. Scales, 7, Bolton Road, Eastbourne; A. G. Smith, 13, Beechcroft Road, Oxford; B. W. Stuttle, 15, Latimer Road, Forest Gate, and J. C. Williams, 222, Park Road, Crouch End, N.

The following Students of the Society obtained sectional certificates:

Section I. Architecture (Planning and Design and Architectural History).

WILLIAM GEORGE DAVIES Birkenhead; ALAN BUXTON DURY, Westcliff-on-Sea; WILFRID EDWIN KELLY, London; Chas. WRIGHT MARLES, Swansea; CLEMENT JOHN PICTON, Chard; HAROLD PHAYRE, Seacombe; LEONARD ARTHUR REYNOLDS, Hull; HAROLD ASCENSUS WILKINSON, London.

Section II. Building (Construction and Materials).

ARTHUR GIDLOW BAYLIS, Wath-upon-Dearne; FRANK RICHARD CATLING, London.

Section III. PRACTICE (Contracts, Specifications and Quantities).

JAMES AMBROSE DARTNALL, London; WILLIAM JOHN HADLEY, GWAUUCAEGURWEN.

Section IV. SANITATION (Ventilation, Drainage, etc.)

ARTHUR GIDLOW BAYLIS, Wath-upon-Dearne; Frank Richard Catling, London; James Ambrose Dartnall, London; William George Davies, Birkenhead; Alan Buxton Dury, Westcliff-on-Sea; Leonard Arthur Reynolds, Hull.

Sketching Visit to Amersham.

Arrangements have been made to visit Amersham, on Saturday, June 10th. The visit is open to Members and Students of the Society and their friends, and the party will travel from the Great Central Railway, Marylebone Station, by excursion train, leaving at 1.30 p.m. Fare 1s. 9d. return. Each member of the party will book their own ticket in the usual way.

Arrangements will be made for tea at Amersham, payment for which will be made at the time. Those intending to join the party must send their names to the Hon. Secretary of the Students' Section, Mr. C. H. Hudson, 12, Almeida Street, Islington, N., as early as possible, and not later than Thursday, June 8th.

Amersham is a quaint old town containing a number of buildings of architectural interest, including the Church which is mainly in the Perpendicular style, and contains some fine old brasses, Market House (1652), Almshouses (1617), and a fine old sixteenth century Manor House.

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New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Society of Architects' Visit to Lambeth Palace.

A numerous party of members of the Society visited Lambeth Palace on May 20th. They were received by Mr. W. D. Caröe, M.A., F.S.A., F.R.I.B.A., the architect to the Ecclesiastical Commission.

Passing along the pathway to the north of the Library, Mr. Caröe conducted the visitors through the Post Room in the so-called Lollards', or Water Tower, and by the turret staircase, on to the leads of the chapel. Here he showed a plan * of the buildings, and explained that a part of the site was acquired from the Bishop of Rochester by Archbishop Baldwin, who had quarrelled with his Benedictine monks at Canterbury, and built here a residence, together with a college and hall, facing Westminster across the Thames. In 1189, while Baldwin was absent in Palestine (where he died the following year,) the monks of Canterbury came to town and demolished the buildings. The next archbishop, Fitzjocelyn, died before his election was confirmed; but the following one, Hubert Walter, reconstructed on the old lines a college and chapel and other buildings, which he nearly completed and of which remains existed till the 19th century.

Passing over three other prelates, they came to the famous Archbishop Boniface of Savoy, appointed in 1241, who at the instigation of the Pope, rebuilt over the crypt the beautiful chapel as it now exists, and probably the cloister which formerly abutted on its north side. The great Water, or Lollards' Tower, was erected or, rather, re-erected—against an older staircase turret, in 1435, by Archbishop Chichele, who also repaired other parts of the fabric. The building records of his

^{*} We are indebted to the Building News for this report. We regret that at present the plan is not available.-ED.

work are wonderfully complete, and we know that on the face of the tower towards the river Chichele erected the niche still visible, and placed in it a statue of his predecessor Thomas à Becket. Nearly seventy years later, in the days of Henry VII, Archbishop Morton built the imposing gateway forming the entrance to the Palace. In a line east of the tower, and a little beyond and north of the chapel, Archbishop Thomas Cranmer reared, in the reign of Henry VIII, the low brick tower which bears his name, The memory of Cardinal Reginald Pole was closely associated with the Palace on account of the additions he made to the Palace buildings, including a lofty tower destroyed in the 17th century, and to the fact that when charged with heresy he was, like Cranmer, confined for a time in the prison chamber, the upper floor of the Lollards' Tower.

The chapel was repaired and provided with new altar-rails by Archbishop Laud, and some of the principal charges against him of inclining to Papistical opinions, and which led to his impeachment, attainder, and execution, were based upon his alterations to that part of the buildings. Great devastation was subsequently wrought at Lambeth by the Puritans, and when his successor, William Juxon, who had attended the first Charles on the scaffold, was installed, in 1660, he found the palace "a heap of ruins." The ancient hall, since 1834 known and utilised as the library, which had been demolished, was rebuilt on the old lines and as nearly as possible in the old manner; but the details were Italian. Whether Sir Christopher Wren had a hand in the design was unknown. The style was very like that of his recognised works, but no record of his connection with the Palace existed, although, curiously enough, a portrait of his father, Dr. Christopher Wren, the Dean of Windsor and Wolverhampton, was hung in the drawing room. Various additions were made to the Palace buildings by subsequent Archbishops, and when William Howley was appointed, in 1826, he found it extremely inconvenient in plan, the kitchen being in one block, and the dining room in another. He called in Edward Blore, who pronounced the residential buildings to be as dilapidated as incommodious, and rebuilt them at an outlay of some £60,000, half of which was borne by Dr. Howley.

Having outlined the architectural history of the fabric, Mr. Caröe conducted the visitors over the buildings. From the turret of the Water Tower an extensive view was obtainable over the Thames and over Westminster and Lambeth. Ascending into the prison chamber, the names cut in the walls by luckless inmates were pointed out. In the Post Room, at the foot of the turret stairs, Mr. Caröe said much indignation had been expressed at the blocking up, in 1875, of the old "Water Gate" of the Archbishops; but careful examination of old plans showed that there was always a roadway on the west side of this tower, and that the Archbishops probably embarked on the Thames just beyond Morton's entrance beside the ferry, adjoining, and nearly on, the site of the present steamboat pier.

The so-called "water-gate" only opened into a garde-robe. Passing into the chapel crypt, Mr. Caröe mentioned that this was excavated to its original level under his supervision some three years ago, when no fewer than five successive floors with which the interior was filled up at various times since the 14th century, were removed, revealing the true proportions of the fabric and the fine circular columns, previously almost buried, which had shallow bell capitals and carried quadripartite vaulting. The mouldings were early and simple, and he thought the work must be assigned a date in the times of Baldwin (1185-90), or Hubert Walter (1193-1205) at latest, and could not be so advanced in character as was the work carried out in the days of Boniface (1240-70).

Within the crypt Anne Boleyn was brought to trial before Thomas Cranmer.

Passing into the chapel above, Mr. Caröe called attention to the coat-of-arms set up by Laud in the quatrefoil opening over the entrance from the Post Room: this was used by his enemies, together with the repair of the stained-glass windows of the chapel, which had been, he said, "diversely patched, like a poor beggar's coat." as evidence of his Paptist tendencies. The windows have, of late years, been restored with glass, reproducing the old incidents portraved in them, by Messrs. Clayton & Bell, who have also redecorated the walls and vault. To Laud or to Juxon must be attributed the flat panelled ceiling, which was replaced in 1846 by Blore with the present imitation vault of plaster. The ante-chapel now contains. on the south side, the tomb of Matthew Parker, consecrated in this chapel as Archbishop in December, 1559—a leading spirit in the preparation of the Authorized Version of the Bible, and on the south side a recumbent effigy of Archibald Crawford Tait; it is shut off from the chapel by the elaborately-carved outer screen erected by Laud, who also erected the beautiful altar-rails, which Mr. Caröe said he had recently replaced in their original position, they having till within the last few months been housed at Addington Palace, now sold. There was a squint at the west end, recalling one in New College, Oxford, in order that the Archbishop might witness the church services from his apartments. The oriel window above the gallery was attributable to Juxon.

Passing outside to the north of the chapel, Mr. Caröe called attention to the form of the windows of the crypt, protected by double barring.

Entering the residential part of the Palace, the Archbishop's drawing room with a wide rectangular bay to the north, overlooking the grounds, was inspected, the fine collections of pictures by (reputed) Holbein, Vandyke, Reynolds, Gainsborough, and others, including the full length, in scarlet robes and Garter riband, of Dr. Christopher Wren, being viewed with great interest. In the long gallery adjoining were seen four or five portraits of the most recent Prelates. These included Tait (Geo. Richmond), Benson (Sir H. von Herkomer), Temple (Herkomer), and the present occupant of the See (A. S. Cope). This corridor led into the Guard

The Journal of The Society of Architects.

The Society of Architects' Visit to Lambeth Palace.

Chamber, partly rebuilt by Blore, the walls of which are closely hung with archiepiscopal portraits of the 17th, 18th, and 19th centuries, from Cranmer and Laud to Howley, the artists including Vandyke, Kneller, Hogarth, and Romney.

The visit closed with a peep into Juxon's Hall, now the Library, with its hammer-beam roof and heavy and almost purely Classic entrance doorway. For a recent congress it has been partially dismantled of its heavy fittings of deal, executed from Blore's designs about 1830, and Mr. Caröe intimated that the Archbishop proposed to take the opportunity of replacing these by others in better material and of slighter scantling, which he hoped might be more in harmony with the beautiful apartment.

Before the party separated, a hearty vote of thanks was accorded to Mr. Caröe, on the motion of Mr. Percy B. Tubbs, F.R.I.B.A., Vice-President, seconded by Mr. English. In replying, Mr. Caroe remarked that just because it was in central London, Lambeth Palace was little known and seldom visited; but as they had seen, it was replete with interest, not only on account of the historical associations, but its architectural features. Those who wished to learn further about the building should consult J. Cave-Brown's Lambeth Palace and its Associations, a work full of interest to the architect and archæologist.

Impressions of a Town Planning Tour in Germany.

BY GEORGE E. CLARE, M.S.A.

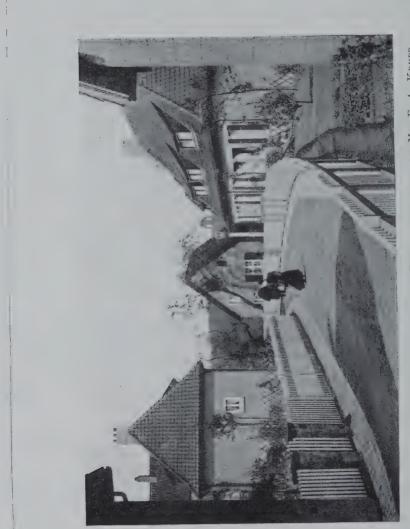
The objects of the tour were to study Town Planning and Garden City Movements in Germany. The party, numbering about forty, left England on Wednesday the 12th April, and comprised several architects, and ladies and gentlemen interested in the question of Town Planning, from various centres in England. They were under the guidance of the Secretary of the Garden City and Town Planning Association Mr. Ewart G. Culpin, who organized the tour, and Herr Adolph Otto, Secretary of The Garden City Association in Berlin, who acted as guide and interpreter. The towns visited were Essen, Dusseldorf, Cologne, Frankfurt, Mannheim, Stuttgart, Ulm, Rothenburg and Nuremberg. Part of the company—including the writer—returned after the visit to Frankfurt.

The English visitors were received everywhere with the greatest cordiality, lectures and tours were arranged for them by the municipal authorities, or the estate owners; and literature was printed in English for their benefit. The hospitality shown and enthusiasm displayed during the visit by the German friends was very striking and gratifying; nothing seemed to be too much trouble to give every possible information upon the subjects of interest.

On the whole, while there was much to learn from German methods of Town Planning and Garden Suburb Development, it was admitted several times that inspirations and ideas for such developments had been obtained in England, and there was nothing very new in the way of architecture or house planning, except in small details; and it was very noticeable that great study is given to the minutest details in even the smallest cottage.

In Germany the municipal authorities have greater powers than is the case in England; they can purchase land and re-sell, or develope portions for extension of towns or out-lying suburbs.

On all hands we found very extensive and comprehensive developments in town and suburban planning, and in this respect Germany is far ahead of our own country. Some of the boulevards and open spaces in the residential portions of the towns are very fine and form a splendid example for some of our town authorities. Having greater powers, these developments have been much more rapidly carried out, and on a larger scale than in the case of most English towns. This has, doubtless, come about partly by force of circumstances due to the excessive overcrowding in the older towns, such as Dusseldorf, Cologne and Frankfurt. These towns being for many years kept within a ring of fortifications, have gradually become more and



IN "ALTENHOF" COLONY OUTSIDE ESSEN, ESTABLISHED BY MR. F. A. KRUPP, FOR PENSIONERS, WHO LIVE HERE RENT FREE.

more overcrowded by the growth of population, so that in some cases it is possible to find rows of streets having a width of not more than ten or twelve feet, with overhanging stories which reduce this space in the upper floors so much that it is possible to shake hands across the street.

Since the fortifications have been abolished large tracts of land belonging to the Municipalities have become available for the extension of the towns, and splendid opportunities have presented themselves for the laying out of suburbs and provision of open spaces for public recreation.

The first town visited was Essen, where the visitors were received by the Mayor in the Town Hall. This town—which has a population of about 300,000—is almost entirely supported by Messrs. Krupp, who employ in their different works 68,000 hands. The town of Essen lies rather low, but on the higher ground on the outskirts of the town, Krupps have laid out some very interesting colonies for housing their employees, including accommodation for all classes of workmen, viz.: quarters for bachelors, married couples, foremen, old married men who are beyond working age, and convalescent homes for invalids. On the whole the Krupps' Works house 12,800 men and families in their various colonies, accommodating altogether 46,000 people. These comprise about a dozen of the older colonies built between the years 1870 and 1875, extended at a later date; and outlying estates, four in number, the latter being laid out on up-to-date garden city lines consisting principally of single and double family dwellings, with groups of houses here and there to give variety, and ample provision for open spaces, recreation grounds and public buildings.

The most interesting colony of all is the Margaretenhofe established from the Margarethe Krupp Habitation Fund. This fund was created by Frau Friedrich Alfred Krupp on the occasion of the marriage of her daughter Bertha, and is chiefly intended to provide habitation for officers in minor positions and circumstances. The endowment comprises a capital of 1,000,000M., and the estate covers 123 acres. By a further donation the whole of the settlement has been encircled by a belt of meadow and wooded land which will eventually enclose the colony now in course of building. The settlement will eventually accommodate about 18,000 people; the houses will be mortgaged to raise the further capital, and the total expenditure is calculated at about 20,000,000M. The settlement is not only intended for housing Krupps' employees, but also officials of Local Administration, Railways, and Post Offices.

The settlement, situated on a well wooded headland, is approached by a handsome stone bridge 42 ft. wide, which crosses a deep ravine and cost £10,000. The entrance to the colony is by means of a broad flight of steps and a handsome block of twelve dwellings. From this the main streets of the colony radiate. A number of houses are already erected, the accommodation comprising a general living room, a spacious kitchen and bath room adjoining; two and three bedrooms and w.c., also basement for coals, workshop and general storage.



AN OPEN SPACE IN "ALTENHOF" COLONY OUTSIDE ESSEN, FOR THE PENSIONERS FROM KRUPP WORKS,

As it is necessary in North Germany to heat the living rooms for at least seven months of the year, particular attention has been bestowed upon the heating arrangement. By some simple device the kitchen range has been connected with a central stove in the living room, so that the waste heat, which ordinarily finds its way into the chimney, is taken to the central stove, where it is completely utilised before going to the chimney. By this simple arrangement it is possible to heat the whole house with warm air during the seasons bordering upon Spring and Winter.

A second reserve fireplace is lodged in the living room stove, which is used during the severe cold of winter. The heat is taken up to the upper stories by sheet-iron pipes, each room has a throttle valve, by which the flow of the heat into the room can be regulated. A water reservoir is placed in the stove, so as to keep the air sufficiently moist. The heating apparatus is so calculated that in cold weather the temperature of bedrooms can only be raised to 12° centigrade, so that their occupants do not get accustomed to too high a temperature. If one of the bedrooms is to be warmed to a higher temperature, other bedrooms have to be shut off.

The settlement has been laid out and the houses are being designed by Herr Geo. Metzendorf, architect, of Essen.

The main streets at Margaretenhofe are about 65 ft. wide and the minor streets about 50 ft. wide; but on the other colonies the streets are much narrower. Only the main thoroughfares have footpaths; the majority of the roads are only about 18-20 ft. wide, and are used for both vehicular and foot traffic. On each side of the road a channel is formed of granite sets to carry away the surface water. These narrow roads are widened at intervals to about double the width where the houses are generally set back and grouped together in blocks. Trees are planted only in these widened portions and in the main thoroughfares. Strict economy is thus maintained in the lay out and construction of streets.

The sites for single family houses range from 300 yds. super. upwards. In all these colonies by far the larger proportion of the houses are four-roomed, *i.e.*, a general sitting room, working kitchen fitted up with an independent close range, which answers for heating the whole house in many cases by means of hot air flues; and two bedrooms. Most of them have also a cellar under the whole surface, and a space in the roof for drying linen. A few houses for foremen have five rooms, and a few have two and three rooms.

The houses are invariably built of rough brickwork and finished with rough cast; in fact it is almost impossible to find a modern house with brick facing. The bricks are hard, but very roughly made, and form a good key for rough cast. The roofs in nearly every case are covered with pantiles of a steep pitch of 50-55 degrees. The rafters are usually 5 by 4 and placed two feet apart with stout wood laths, and the tiles well torched. The valleys are also sometimes formed with pantiles and a few cases were noticed where they were used for vertical tile hanging, giving quite

a picturesque effect. One noticed occasionally a slate roof, and in such cases very ingenious methods were adopted for avoiding lead work. The junctions of dormers, chimneys and valleys were all formed of slates cut to special shapes and worked on the curve. The floors were in some of the better class houses constructed of concrete with stout linoleums glued on to the concrete with a close cut joint, and finished with wax polish. This kind of flooring is in very common use in the hospitals and makes a very hygienic floor. Wood floors are generally stained and polished, with a few mats where required.

The windows are all casement pattern, generally of two-light width, hung folding and opening inwards; in fact it would be a very difficult matter to find any other kind of casement or a sash window in any of the German towns mentioned. The internal doors have generally a rebated edge and half is rebated on to the lining and half in the lining. This is a simple device to prevent draughts. Very little wall paper is used in the cottages; the inner surfaces are distempered, with dark coloured dados finished with a neat stencil pattern and the upper parts stippled with greens, greys or reds on a light cream ground. This gives a very nice, soft effect. I was informed that this stencilling is done with an indiarubber stipple brush. The average superficial area of the living room is 160 ft. super., and the height of the rooms usually about 8 ft. 3 in. The rents charged for single family houses, including water rates, is from £3 to £3 5s. each room per annum, or for a four-room house £12 to £13. For block dwellings the rent of a four-room house would be £11 to £11 10s. per annum.

The majority of the working class in the towns are still housed in block dwellings owing to the high price of land, so that to find land cheap enough for single family dwellings, most of these colonies are some distance from the centre of the town.

The majority of German working men are not yet educated up to the advantages of living far out of the town; but they are gradually becoming alive to the benefits to be derived from residing amidst healthful, quiet, rural surroundings.

Amongst the examples of suburban planning for small towns one of the best we saw was at Gladbach, about ten miles from Cologne. This is being developed, and is laid out by Herr L. Bopp, architect, who also designs most of the houses.

The land is sold at the rate of £300 per acre. The sites have to be purchased and paid for outright, and the town authorities lend 90% of the value of the house, at the rate of 3% interest per annum, and a free conveyance is given. The plans are included in the cost of the house. All the land is bought up by one owner and all the plans prepared by two architects. The soil is very poor so that rich soil has to be imported from other districts for the gardens. The houses are all sold freehold, and between 80 and 90 houses have been built in seven years. All single family houses on this estate have a minimum of five rooms, *i.e.*, three bedrooms, one living room, and one kitchen with a small scullery adjoining.

Town Planning Tour in Germany.

The chief industry in the place is a large paper factory, and this firm lends money to their employees for the erection of their houses; the first £50 is free of interest, and the balance of the purchase money up to 90% of the whole is lent at 3%.

The roads on this estate are all about 20 ft. wide with side surface water channelling and no footpaths. Very little is spent upon the roads, which are simply shaped out and a little metalling spread on. No sewer is provided, but gas and water mains laid on each road. Each house has a separate deep cesspool for the drainage, and the sub-soil being a very light sandy one, no difficulty has been experienced in the disposal of drainage in this simple manner.

The maintenance of the roads is borne by the Municipal Authorities, but the expense connected therewith is very small indeed. In these narrow streets of 18 ft. to 20 ft. in width, the lighting is effected by gas lamps hanging at the corners of houses.

With regard to the cost of such houses as are here described; it is a little surprising that in Germany it exceeds considerably the cost of similar houses in England, except on one estate where we were told that the land was sold without profit. In this case it is easy to understand that the selling price of the houses was rather excessive. As near as we could get at it, the cost of simple cottages worked out at about 6d, to $6\frac{1}{2}d$, per ft. cube, whereas similar houses could easily be done in many parts of England, under favourable circumstances, for 5d, to $5\frac{1}{2}d$, per ft. cube.

At Buchschlag an outlying garden suburb near the town of Frankfurt we were informed that the land cost $\pounds 200$ per acre in bulk, and was selling in building plots with a minimum area of 1,000 square metres at $\pounds 800$ per acre, the area and construction of roads costing at the rate of $\pounds 350$ per acre; so that a gross profit of $\pounds 350$ per acre is realized. This estate is held by a Society on option from the State, and the Society stipulates that the house must be built within three years from date of purchase of site. The Society hold one million square metres of land, and undertake to preserve one third of the total area in open spaces and streets. The roads are made and maintained by the Society, and when a sufficient number of houses are built they are taken over by the Rural District Council. The Society actually purchases from the State only such portions as and when sold for building purposes. The land for individual houses must be purchased through the Society and the option extends for twenty years without any obligation as to how much land shall be disposed of within that time. Practically all the houses are detached, and cost from £550 upwards.

The Society and the Royal Institute.

UNITY IN THE ARCHITECTURAL PROFESSION

The proposals for the fusion of The Society of Architects with the Royal Institute of British Architects in the interests of Statutory Education and Registration have been the cause of much comment in the technical press, the general feeling being in favour of the scheme in principle.

The negotiations have gone so far that it has been assumed that nothing would arise to prevent or hinder the scheme being carried into effect.

Since then, as reported in our last issue, some technical point has arisen at the Royal Institute which at the moment prevents their completing the agreement upon which the whole matter rests. The matter therefore, so far as the Society is concerned, is in abeyance, and further developments are awaited.

Whatever may be the final result of the negotiations it cannot alter the opinions expressed on the proposals by the professional journals, which are here set out.

THE JOURNAL OF THE R.I.B.A.

In the Annual Report of the Council of the Royal Institute it is stated that under the terms of the policy agreed upon by the Royal Institute on March 4th, 1907, it became necessary during the present session for the Council to draft a Registration Bill to secure the statutory recognition of the profession. This work was first entrusted to a strong committee, which drafted the principles of a Bill on broad lines to provide for the objects aimed at—the enrolment of all qualified architects within the Institute, the compulsory architectural education and examination of those entering the profession in future, and the legal recognition of qualified as opposed to unqualified architects. At this stage it became necessary to consider the position of The Society of Architects. On the initiative of the President a friendly conference was held between representatives of the two bodies, and it soon became apparent that there was a broad ground of agreement in their respective policies. Serious negotiations were then entered upon, and a scheme was prepared by the Councils of the two bodies which provided for the winding up of The Society of Architects and for the election of its members into the various classes of membership and Licentiateship of the Royal Institute. The details of this scheme and the principles of the Registration Bill were laid before a special general meeting on April 10th, and after a long discussion were approved. If the scheme is approved by the general body of The Society of Architects and the resolution to effect the necessary changes in the by-laws is confirmed by the Royal Institute it will at once be proceeded with, and will remove the last obstacle which hinders the architectural profession from approaching Parliament as a united body in favour of the principle of registration.

THE BUILDER.

In a leading article in its issue of May 5th, *The Builder* offers its heartiest congratulations to the Royal Institute and to The Society of Architects on their having been able to arrange a mutually satisfactory basis for amalgamation. In using the term "mutually satisfactory" we do not mean, says *The Builder*, that it need be inferred that any terms could possibly be arranged that would or could satisfy the individual members of both bodies, some of whom will feel, and quite legitimately feel, that their position is adversely affected by the compromises that must necessarily be involved. All the more honour to them, in that they have sunk personal disadvantages for the sake of loyally supporting what the majority have deemed desirable in the interests of the architectural profession as a whole.

We do not desire to draw invidious comparisons between the senior and the junior body, but it is essential to a clear understanding of the difficulties, now happily surmounted, to point out a few of the concessions needed to secure united action by adopting this amalgamation.

The Royal Institute of British Architects have some justification for their view that, whatever may be the present position of the Society, it has not in time past maintained the same standard with regard to qualifications as that adopted by the older body. It would be unreasonable to regard this as possible, as a young Society cannot establish itself without a certain laxity in the admission of its earlier members; but the fact remains, that the average of professional ability must be somewhat lower, thus detracting a little from the value to be attached to membership of the Royal Institute of British Architects on the inclusion of its competitor. The grade hardest hit by this is, of course, the Associate class, comprising at the present time many whose attainments are superior to the average of the Fellows, and who thus expect to find a still larger number of less able men in what is nominally a superior class, and who, moreover, feel that there is a risk that the new Licentiates will be in the same position as themselves in regard to future promotion. We think that on this latter point the Associates are entitled to some assurance that the promotion of a Licentiate should be something more than a mere formality based on a specified period of independent practice, and should indicate a standard of professional skill higher than that required in passing the Associateship examination. However, there is no reason to assume that such a standard will not be set up in the near future even if it is not considered practicable at present. Considering how long it is since the movement to raise the qualification for Fellowship began, anything that stands in the way of this must be regarded as retrogressive, and only to be accepted in view of something more important to be gained.

That unity of action is for the moment more important will probably be generally admitted, and the postponement—for we are assured it is merely a postponement—of the higher Fellowship qualification must be considered as the sacrifice of the lesser for the sake of the greater.

The Society and the Royal Institute.

While this, the main concession that has been made by the Royal Institute of British Architects, is certainly an important one, it must not be overlooked that the Society on its side gives up much in agreeing to merge itself in the older body. The Society has had, from its inauguration, a clear and definite policy on the subject of professional registration, and while this policy has been slowly gaining ground in the Institute, the Society has had all along pronounced and definite views on the subject, more drastic in character than the Institute, even at the present time, are prepared to adopt. It is not the question as to what course we think the wiser: though, we may admit that our sympathies are with that proposed by the Institute. Yet we recognize the broad-mindedness of the Society in conceding minor points provided the main principle is adopted. We might even go further, and claim that even those who have no faith in registration can still recognize the spirit which has rendered this unification possible, and are prepared, with Mr. Arthur Keen, to welcome it as offering possibilities for the advancement of professional education. We cordially agree with Mr. Keen in holding that education is at the present time a far more important question than registration, in that to raise the quality of attainment all round is more calculated to improve our architecture than the exclusion of the lowest grade of practitioner, who would not, under any circumstances, exercise much influence on average standard of this art.

The policy of strengthening the faculties of the more competent raises the general quality of work, and the chief merit the system of registration can claim lies in the facilities it offers for a strong central body to exercise initiative control over education—and not the one we have heard so much of, viz., the elimination of the incompetent.

There must be many whose chief interest in obtaining a settlement of the question of registration is based on the hope that it will clear the ground for a thorough re-organization of our educational methods, without which our architecture is doomed to drop behind that of other nations who are either by nature more gifted in artistic faculties or are more alive to the necessity of cultivating those they possess.

If the new union will secure this advance it will justify all the sacrifices that have been made to consummate it.

THE ARCHITECT AND BUILDERS' JOURNAL.

The coalition between the R.I.B.A. and The Society of Architects, although it cannot be expected to give unalloyed satisfaction to all concerned, is nevertheless, on the whole, says *The Architect and Builders' Journal*, an event of fair augury for the profession at large. Upon the causes of the discontent to which the amalgamation, like all compromises, is palpably subject, it would be at once futile and indelicate to expatiate. In face of the accomplished fact, it is the wisest policy to make the best of it. To this end, it is necessary to take the broadest possible view of the situation, and to give all possible weight to the blessed word solidarity. Parliament

and the public, knowing nothing and caring less about the professional nuances, will not trouble to enquire whether the R.I.B.A., by absorbing the junior organization, is levelling up or levelling down, strengthening its position or weakening it, and no good object would be served by any attempt either to disturb this blissful ignorance or to introduce any disruptive element into the "happy family" arrangement by which the appearance at least of a united front has become possible. In any legislative or other important appeal, it was formerly always easy for the opposition to score heavily by simply pointing to the existence of the separate organizations, and hence contending that neither the one nor the other was entitled to call itself fully representative; and there were other complications which must happily disappear with unity, and may thus form a sufficient set-off for the complications which are pretty certain to arise from it. Of course, as it had been always admitted that The Society of Architects had no raison d'être apart from its insistent advocacy of Registration, it may now be presumed that the guarantees on this point are strong enough to justify the belief that the measure will be pressed forward with earnest determination by the united bodies; and that appears to be the main significance of the combination. Subsidiary issues there are in plenty, but they are mostly of the sort, that may be trusted to adjust themselves automatically, and, it is to be hoped, silently.

THE BRITISH ARCHITECT.

Whilst we have always believed that the Royal Institute of British Architects should be supported as the authoritative embodiment of the professional life of architects, and that its power for good is very great, we have, says The British Architect, also felt that its aims have been too much directed towards the economical and commercial aspect of an architect's work. We therefore much regret its further development in this respect, and in the widening of its bounds so as to include those who can only be styled Licentiates. Evidently there are large numbers of architects willing to accept this label of an inferior status, possibly in the hope that with the lapse of time they will rise to the honourable dignity of full members. One cannot help sympathizing with the many architects who have qualified themselves by diligent study for the membership or Associateship which they hold, and who find that by this great omnium gatherum arrangement they will rank equally with those who have obtained their membership in a much easier way. The absorption of The Society of Architects into the Royal Institute of British Architects is a good thing at all events, as it is very desirable that there should be only one fully representative body for the profession. Time will show whether the business instincts, which appear to be the controlling forces in the architectural world just now, will guide us to a wider recognition of the dignity and importance of the profession; possibly they may, for the world regards the architect chiefly in the light of a policeman, to protect it from the builder and other wicked people.

The Society and the Royal Institute.

THE BUILDING NEWS.

The decision arrived at by The Society of Architects to amalgamate with the Royal Institute of British Architects has, says The Building News, the hearty endorsement of every true friend of architecture and architects. The Society has done well the work which mainly justified its existence. The Institute is doing better to bring about that which we all want accomplished—the legal recognition of architecture, and the proper restriction of its practice to qualified men. The union of the two Societies on business-like terms guarantees fresh impetus to the movement for registration, and its early success. It brings about, moreover, a unity of representation, without which, as things are to-day, it is hardly likely any Government would entrust the guardianship of entry to the profession. The Society's twenty-six years' existence has been a vigorous and beneficial one. Registration has been the raison d'être of the Society's existence, and the increasing attraction to new members. Like most movements of its kind, it had, of course, to encounter, first ridicule, then indifference, and, lastly, the assurances of those who had either ridiculed or stood aloof, that it was the very thing they had always been in favour of. One need not inquire too curiously to what extent the activities of the Society were responsible for the new life that began to reanimate the Institute. All of us have rather welcomed heartily the change that has come, and appreciated the wisdom that has led the Institute to broaden its borders, and to become the live, capable, and thoroughly representative organization of the profession it is to-day, to which the united voice of its members may legitimately demand that the guardianship of architecture from charlatans shall be committed, first in the public interest, which is, and ought to be, supreme, and next in that of the legitimate and qualified architect. None have more wisely perceived that this being so, the days of The Society of Architects were numbered, than its present President and Council. No more generous recognition of the fact that to the Society was due the inauguration of the work it has since taken up itself could have been accorded by the Institute than the consent to the scheme of amalgamation that has been mutually arrived at. Nor could one welcome any more hopeful augury of the early attainment of Registration than the unity thus achieved in the consolidation of interests effected.

Recommittal of the St. Paul's Bridge Scheme.

The protests of architects and other interested parties against the proposals of the City Corporation for the projected St. Paul's Bridge, were successful when the House of Commons decided, by 156 to 99 votes, to send back the Bill for reconsideration. The debate was opened by Mr. Philip Morrell, who moved that the measure be recommitted, and that the Committee be instructed not to agree to any scheme for the construction of the proposed bridge until they were satisfied that the plans had been prepared under the advice and supervision of leading architects, and that the scheme, both in respect of architectural design and convenience of traffic, was the one best adapted to the public needs and to the character of the site.

Lord H. Cavendish-Bentinck, in seconding the motion, maintained that the House, which had recently passed the Town Planning Bill, would be stultifying itself were it to agree to the Corporation scheme.

Mr. Mooney, the Chairman of the Committee that had considered the Bill, took the view that there was not sufficient ground for recommittal, and pointed out that the Royal Institute of British Architects who had petitioned against the Bill had failed to appear and explain their views. But they could still be heard in the House of Lords. He contended, moreover, that the suggestions of the architects would be far more detrimental and dangerous to St. Paul's than the scheme of the Bill.

Sir F. Banbury, who also opposed the motion, said that the Corporation of London had now undertaken to submit the plan of the new bridge to competent architects. The alternative scheme for a street with a dead-end opposite St. Paul's would cause serious blocks in the traffic, and would entail an expenditure far exceeding that contemplated by the Corporation. There was a plan of Wren's approximating closely to that which the Committee had approved.

Sir William Alfred Gelder, F.R.I.B.A., was convinced that if this scheme was allowed to pass it would be one of the most fatal blunders ever perpetrated in London architecture. We had a cathedral in St. Paul's which was one of the monuments of the world. One blunder had been made in allowing the railway bridge to cross Ludgate Hill, and thus take away the view of St. Paul's from Fleet Street. They did not want to repeat a blunder of that kind, but rather to open out St. Paul's, so that its beauties might be better understood. They had been asked why the architects had not opposed the Bill. They did petition against it, but went no further, and it was not to be expected that they should, without being properly retained.

Mr. E. Lamb opposed the motion for the recommittal of the Bill, and gave an undertaking on behalf of the City Corporation that if the motion were withdrawn no objection would be raised to the appearance of the Royal Institute of British Architects before the Committee of the House of Lords. The adoption of the proposed

Recommittal of the St. Paul's Bridge Scheme.

alternative scheme would mean the abandonment of the proposed tramway across the bridge.

Lord Balcarres supported the amendment, and contended that to pass the Bill in its present form would be to render the Town Planning Act, passed with such a flourish of trumpets, a dead letter.

Mr. Emmott (Chairman of Committees) doubted whether the vista of the alternative scheme would be so wonderful as the opponents of the measure made out. As far as engineering difficulties, traffic difficulties, and cost were concerned, the Corporation scheme was preferable to the alternative scheme. He urged the House to read the Bill a third time.

Mr. Lyttelton held that public interest should not be allowed to suffer because the architects had failed to appear before the Committee.

Mr. Morrell proposed an instruction to the Committee not to agree to any scheme for the construction of the proposed new bridge until they were satisfied that the scheme had been prepared under the advice and supervision of a competent architect or architects chosen from among the leading architects of the day, and that the scheme, both in respect of architectural design and convenience of traffic, was the one best adapted to the public needs and to the character of the site.

Objection being raised to further proceeding, the debate on the instruction was adjourned.

Sculpture in Architecture.

The lecture delivered by Mr. W. A. Frith before The Society of Architects on the "Relation of Sculpture and Carved Ornament to Architecture," if it proves the case for their combination in design, points, says Indian Engineering, to the existence of a harmony only when the architecture is of a high order and the sculpture of artistic quality. Carved ornament judiciously selected may be made appropriate almost anywhere, but sculpture, more particularly of the human form, is one of the most difficult adjuncts of architecture to introduce successfully. While we cannot conceive of Egyptian, Assyrian, Greek, or Roman architecture, in their monumental forms, as complete without the presence of sculpture in some form, we think most of the Renaissance work would be better without it: and Gothic design seems to us to admit of it only in a comparatively subdued and chaste form. There is a twofold reason for this, firstly the designers of early times combined in themselves for the most part the faculties of architecture, sculpture and painting; and even when the architect was not expert enough in the sister arts to undertake their execution wholly himself, he was sufficiently skilled to lay down the general design for the expert to execute, and to see that it was his idea that was expressed in the building even when other hands executed the details. There was thus a unity and harmony in the finished work that could be attained in no other way, and we had a building in which sculpture, carved ornament and painting were true complements of the architecture. But where is the architect of the modern day who could do the same? So complex has every science and art become, so much of allied subjects has it become compulsory to master, and in the case of the architect so complete a knowledge is demanded of him of the history and minutiæ of every phase of architecture the world has ever known, that in very weariness he has to leave untouched the lore special to the sculptor and the art special to the painter. And so when a structure is wanted in which the three arts are to be presented, we are given a chequered whole proceeding from three minds which, as likely as not, have been working out of harmony with one another. The result can in no instance be perfect and must often seem incongruous even to the untutored mind. In the next place, how many modern buildings are there of sufficient dignity to receive without painful contrast the class of sculpture which alone is admissible into architecture? They may be improved by a judicious use of carved ornament, perhaps even by the subdued employment of a bas-relief here and there; but we much fear most of them would really be vulgarised by the addition of statuary. We can all of us call to mind examples of meretricious buildings, resplendent in red brick, stucco and terra-cotta which might pass muster as fair exponents of (modern) art, and might even kindle enthusiasm in minds with a taste for the florid, but for the unhappy array of statues, or statuettes, placed where they might be most conspicuous regardless of environment. Have we not felt when we

Sculpture in Architecture.

have seen them that it would be better for the building and better for the statues if they were removed and collected in a single room for the beholder to view at close quarters and admire, or otherwise? A critic of the statuary that adorns our maidan has said with some exaggeration that it would be better for the maidan if they were all taken down—and shipped back to England, whence they came. If it is possible for such an opinion to prevail regarding sculpture designed by British artists and disposed on pedestals and in situations most carefully chosen, what chance, we ask, has statuary of finding favour when scattered about a commonplace public building, not in situation specially designed for it, but here, there and everywhere so as to be conspicuous and catch the eye of the passerby? And between such a disposal of sculpture in architecture and the natural and ennobling one there are many gradations. We think sculpture has a distinct place in architecture, but to be its true complement the sculpture must be noble and also the architecture.

The Society's Visit to Amersham.

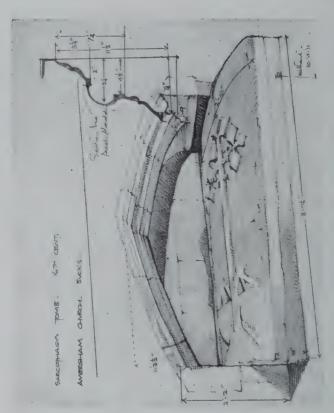
The Society of Architects Students' Section opened the season's Sketching Parties with a visit to Amersham, on Saturday, June 10th. Good weather favoured the outing, and owing to the excellent arrangements made by Mr. Hudson, the Hon. Secretary of the Students' Section, the visit was in every way enjoyable.

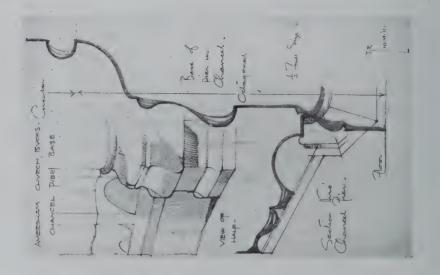
Amersham (or Agmondesham) is a market town in Buckinghamshire, and is within easy reach of London by the Great Central Railway from Marylebone. The town is said to possess a Saxon foundation, and it is chronicled that it was divided into manors in Norman times, one of which was held by Roger, a subordinate of Odo, Bishop of Bayeaux.

The town as existing to-day, consists of a main thoroughfare about half a mile in length, stretching approximately East and West, in which is situated the Market Hall, the Almshouses, and the Manor House. The Church, which lies some 200 vards north-east of the Market Hall, is off the High Street, and consists of nave with clerestory, North and South aisles and transepts, chancel, South porch and West tower. Although the foundation of the Church can be traced to the 13th century. There is little work remaining (with the possible exception of the 13th century, West window of the South transept), prior to that of the 14th century. The nave, South porch, tower, and transepts are possibly of this date, but the nave roof—a singularly fine example of oak joinery—and the clerestory windows are of later date (15th century), while the arches to the East side of the North transept, and the North side of the chancel, are splendid specimens of well-developed Perpendicular work. The Sarcophagus Tomb under the South window of the South transept is of this later date. The tower, which has been over-restored, is of the 14th century, and has a curious squint about 14 feet from the floor level on the South wall, the arch to the nave is a fine Perpendicular one. The West and East windows are uninteresting, and indeed the church is singularly lacking in good tracery. The furniture, fittings, and font are modern and commonplace. From a door in the North wall of the chancel a flight of steps leads into a Georgian Chamberthe mausoleum of the Drake family—which contains some very handsome marble monuments dating from 1728, the date of the first of the series of monuments to this illustrious family. At the top of the steps some very well designed wrought-iron railings are worthy of attention.

The Market Hall, which was founded by a member of the Drake family in 1682, is a very pleasing example of the period of development of English architecture which followed the advent of the foreign craftesman. The Hall, which is built of red brick in Flemish bond, with Nitrified grey headers to each course of brickwork, has free stone dressings to the ground floor, and is roofed with tiles which have weathered to a warm dark brown. The structure is surmounted by a quaintly-designed wooden

THE SOCIETY OF ARCHITECTS' VISIT TO AMERSHAM.
SKETCHES BY J. R. LEATHART.



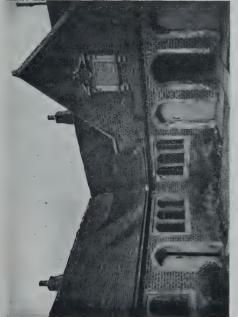




MARKET HALL.



ALMSHOUSES, HIGH STREET.



COURTYARD OF ALMSHOUSES.



THE SOCIETY OF ARCHITECTS' VISIT TO AMERSHAM.

Photographs by Mr. John Todd (Member).

The Society's Visit to Amersham.

clock turret. The ground floor is open and forms the Market Place, and access is gained to the first floor (which is carried on brick piers and arches) by an oak staircase at the North-east end of the Market Hall underneath. The fenestration of the main front is very pleasing, and the six large windows are fitted with wood frames and lead casements. The central feature of this front consists of a stone cartouche, supported on a small corbel, bearing the arms of the Drake family, and is an example of vigorously carved ornament applied in a restrained manner, which is altogether admirable.

The Almshouses, which were endowed by Sir William Drake in 1657, are entirely in brick. From the street, a wall, pierced by an archway of some architectural dignity, screens a courtyard paved with cobbles and flagstones; around which the pensioners' quarters are grouped. The ends of the two wings facing the street are decorated with very picturesque moulded brick features consisting of two pilasters with an entablature over them. It is possible to trace in this building, which is earlier in date than the Market Hall, a stubborn resistance to the introduction of foreign design, and thus three centred arched window and door heads (which were originally stuccoed) are to be found in proximity to an essentially renaissance cartouche, bearing the founder's arms, over the mian entrance.

Shardelos, the Manor House, is apparently a building of many periods. The wing of the house facing the High Street is late 16th or early 17th century, and consists of three equally balanced gables having a projecting two-storey porch in the centre. The charming combination of the original lead casements and the later sash windows, and the brick cornice and pediment of the entrance, give the house an air of quiet dignity which is characteristic of the domestic architecture of this period.

It is rather interesting to note, in the house nearly opposite Shardelos, the use of the grey pitrified headers in Flemish bond which are similar to those in the Market Hall. These two structures are possibly of the same date (1682), as no other building in the town possesses this peculiarity.

Amersham, by reason of its genuine antiquity, possesses special attractions to the antiquarian and architect, and the pervading air of picturesque charm and beauty is certain to appeal to the lover of the English village.

The illustrations accompanying this article are reproductions of some excellent photographs taken by Mr. John Todd, a member of the Society.—J. R. L.

A Complete Ward Unit for a Modern Hospital.

The paper by Mr. Saxon Snell, F.R.I.B.A., on "Hospitals," published in our last issue included a lengthy reference to "Ward Blocks," in itself a subject to which a single paper might well be devoted.

The *Hospital* has been publishing every week various architects' versions of a model ward unit with a view to eliciting criticism and suggestions.

Mr. Edwin T. Hall, F.R.I.B.A. expresses the view that the subject of what is most convenient and comprehensive for a clinical ward unit in a general hospital is of importance, as on such elements depend the successful working of the hospital with the minimum of waste in energy and maintenance.

The number of beds to be provided in the unit will vary somewhat in relation to the total number of beds in the hospital. In small hospitals the units are small, but for the present purpose it may be assumed that a large modern general hospital or royal infirmary in an important town is under consideration.

In such large hospitals there is not a consensus of opinion as to the exact number of beds that should be provided in the unit. For example, St. Thomas' Hospital in London has a ward, or rather floor unit, of 28 beds; Derbyshire Royal Infirmary, 26; Liverpool Royal Infirmary, 32; Newcastle Royal Infirmary, 25; Manchester Royal Infirmary, 26.

Abroad there is similar diversity. For examples, the Johns Hopkins Hospital at Baltimore has 28 beds; the Eppendorf at Hamburg (in its largest pavilion), 32; and the Nürnberg, 36.

While, therefore, no dogmatic pronouncement can be made, the author has found 25 to 27 beds to have been quite satisfactory.

Some hospital wards are made 28 and even 30 feet wide, but 27 feet appears to be liberal, as if 6 ft. 6 ins. be allowed for a bed, there remains a distance of 14 ft. between the beds, ample for every purpose.

If this be so, any greater width involves useless expenditure both in capital and maintenance. It is true that central stoves (generally two) are often placed in the wards, but in Mr. Hall's judgment these are undesirable obstructions. One merit claimed for them is that patients can sit around them in comfort. Against this are to be set (1) interference with traffic; (2) they do not warm the air where it is most required, namely, near the outer walls and windows; (3) the horizontal flues carried from the stoves to the outer walls are practically rarely swept. In my judgment an open fire at the end of a ward gives the requisite note of cheerfulness, while the effective heating should be done by hot water radiators under windows.

The height of the ward is really governed by the æsthetic proportion. For practical purposes sanitarians hold that any air in a room more than 12 ft. above a

floor is of little or no value, but a ward 27 ft. wide and of great length requires a height of more than 12 ft., and this requirement is not only one of taste, but is of therapeutic value, for too low a room has a depressing influence on a patient, and so tends to retard recovery. A minimum of 13 ft. 6 in. should be given to such a ward.

The cubic space per patient is one about which much has been written. Personally I am of opinion that in a properly-designed and ventilated ward with windows on both sides this can be deduced automatically from what is otherwise convenient; ample space about and between beds is necessary for staff, etc., and 8 to 10 ft. centre to centre along the wall is adequate. This gives, say, 1,400 to 1,800 feet per bed.

In small wards more area is required and 2,000 feet per bed gives a good cubic result.

In addition to the large general ward at least two subsidiary attached wards are desirable, one of two beds and one of one bed. These should be in close touch with the large ward, should open out of the ward entrance corridor, and be visible either from the sister's room or the ward kitchen—If, as is sometimes the case, they are placed on the other side of the general hospital corridor, they are not so readily under observation.

The question of a sister's or nurse's sitting-room is one on which authorities differ. Some hold that the nursing staff should be in the ward when on duty and away from it entirely when off duty. It is well to provide the room, as it is always available as a single bed ward if not required for the sister, and may be set apart for sick nurses who are more likely to be well looked after inside a pavilion than in the home. A ward kitchen is essential to the unit, and attached to this should be a larder, preferably entered from the kitchen for convenience and saving of labour. The other accessories are a linen room for the needs of the unit; a patient's clothes room fitted with iron open bins to keep the property of each patient separate, and a broom store in which the brooms, brushes, pails, etc., of the unit should be kept.

A day-room for the use of patients may be within the ward block or in a position convenient thereto. There should also be a physician's room in connection with a pair of ward units, an appliance-room, and a room for research work.

Adjacent to the unit should be a trolley dock, recessed from the main corridor for coal or food trolleys.

The sanitary appurtenances are important. The nurses should have their own lavatory and w.c. properly cut off from the ward unit, preferably at the hospital corridor end, and in this lavatory should be a draw-off sink.

The patients require a bath-room which, with lavatory basins, may be in one tower, the w.c.'s, sink-room, etc., being in another, both having a proper cut-off. The sink-room should have a macintosh washing sink, a scalding sink, and a bed-pan sink

When there is plenty of room laterally and the ward is not too long these towers

are usefully placed at the north end of the large ward, one on each side, and between the western one and the escape stair-case at the south end a sun balcony wide enough to take patients may be constructed. This position for the sanitary towers is good if there are several small wards, as it saves a long walk for patients and obviates the necessity of carrying bed-pans all through the long ward. The value of sun balconies is not sufficiently appreciated, and it is a good plan to supplement the usual ward balconies by sun balconies off, and sheltered by the main corridor between, the pavilions, as shown on the plan.

Anachronism in Architecture.

A writer in the *Church Times* takes to task a critic who uses the phrase "A Modern Anachronism" in describing a church recently erected from the designs of a well-known architect, whose *métier* is said to be domestic buildings.

As the writer (Viator) points out, an architect may be distinguished or not, as other men have the taste to distinguish his work or opportunity for estimating it. To be distinguished, an architect must be in the fashion: he need not have any other merit. By a slight verbal alteration it might be said that his work has distinction; and that is genuine criticism, true or false. Let us suppose this to have been meant. But his domestic work: the critic adds that churches are evidently not his métier The French word stamps the criticism with a mark of finality. But when did this differentiation of function begin? Throughout the whole range of the history of architecture, distinguished artists seem to have controlled the building of churches and cottages, of stables and palaces, without discrimination. The meaner work has often been entrusted to mean men, who have also, being numerous, got into their hands much work that was not meant to be mean; but men whose work has distinction have set the mark of their personality on all structures alike. What is the meaning of this theory that the building of a church is artistically a business differing from that of building an hotel? It is obvious, of course, that a good architect may not know what is wanted in a church, as another may not know what is wanted for a boarding house, and so may not be able to plan it with good effect. There seems to be a theory that the art applied to the building of a church is not the same art as that which is applied to the building of business premises. Is evolution at work? Differentiation was mentioned in Mr. Herbert Spencer's lucid definition of that natural process, but architecture attained a high degree of development in a merely homogeneous condition; and are we now passing beyond Buonarotti, Bramante, and Wren, to a higher form of the art? It is joyous if that be the case.

But there are more particular criticisms; this architect's work, it is said, is not English. It may be that his distinguished domestic work is sufficiently national, but that he approaches a church with less insular conceptions. It may even have occurred to him that Christianity is not an exclusively English growth. But even Churches take on themselves a national colour. Let us accept the principle of criticism that an architect's work in a church may be insufficiently English. Then what is wrong with the building referred to? Some ornaments, we are told, are rococo. Again, the word is a strong tower. But what does it mean? Johnson knew it not. Littre has it. Le genre rococo means "le style d'architecture, d'ornamentation, d'ameublement, qui régna en France dans le XVIIIe siécle, caracterisé par les façades hérissées, courbes et frontons recourbés et brisés, par la profusion

des ornaments, des rocailles, guirlandes de fleurs enlacées d'une mainère affectée." But the word is used with less precision. George Tyrell spoke of "the rococo heaven of the Apocalypse." There is nothing there of these bristling frontages, these curved and broken pediments, these festoons, and this rustic grotto-work. The sea of glass, the walls of jasper, the gates of pearl, the streets of gold, the foundations of amethyst and chalcedony, of chrysoprase and jacinth, are of another inspiration; you may see them when the dawn comes leaping to Patmos over the blue waters of the Aegean, or when the sun sets in jewelled splendour behind the limestone ranges of the Arabian desert. That, he grants is not English; the true rococo was naturalized here as completely as in France. But those ornaments placed by the architect in his new church answer neither to the one description of the rococo nor to the other. To tell the truth, they are rather grim; stern and unbending in form as in material.

"But," says the critic, "they are in the loudest of Roman taste." That makes me pause. Is he confounding the *rococo* and the *baroque*—both well-worn terms of criticism! The writer has seen and admired something not altogether dissimilar at Rome. Is that the reason why they are not English. And then light breaks: "The letter and spirit of the Ornaments Rubric are flatly disregarded." Ha! that is the trouble. He will look up the Ornaments Rubric, to see what it says about the rococo and loud Roman taste.

It says that the ornaments of the Church shall be such as were by authority of Parliament in the second year of King Edward the Sixth. Is he to hunt through the statutes of that year to find some canons of architectural taste? Or is the rococo excluded merely because it is of later origin? But what, then, of the loud Roman taste? He believes it was not altogether uncultivated in England as early, or as late, as the year 1548. But again, are we tied to the precise artistic fashions of that memorable year? Does the priceless boon of uniformity extend so far? Is here the reason of that differentiation between domestic and religious architecture?

There remains the question with which he began. What is a modernist anachronism? Anachronism in art means the admixture of characteristics of different ages. It was anachronism when Shakespeare made Julius Cæsar hear the clock strike, when Scott clothed Ivanhoe in plate armour, when Dumas made Cornelius de Witt talk about oxygen, when Veronese painted the Count of Darius in Venetian costume, when Rubens set Paris to judge between three unmistakable Flemish ladies en déshabillé. The great masters, it will be observed, have revelled in such anachronism; the little masters are shy of it. But what is anachronism in architecture? It would have been anachronistic, he supposes, if Ralph Flambard had furnished Durham Abbey with gas-fittings in the style of the late Sir Gilbert Scott. But he could not. It would be anachronistic, one would think, if an architect were to build a church in a London square, and were to furnish it in exact imitation of the style of the 15th century. But that is just what he does. Is he,

then, a great master. The anachronisms of the great masters usually take the contrary form of furnishing antique interiors in the style of their own time. Architects of the 18th century did this without hesitation—at Winchester College Chapel, for example; the little masters of the 19th century cast out the resultant abominations, and we now lament and tear our hair, and would fain buy back for bags of gold the things which they sold as shillings-worths of rubbish.

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But what is a modernist anachronism? Somebody has hung up a sanctuary lamp consisting of a metallic filament electric lamp in a red glass. Modern, with a vengeance. Modernist, perhaps, in some new sense of the word. But why anachronistic? The building is a church of the 20th century, built to serve a parish of equal modernity. He does not greatly admire this kind of lamp. But why is it anachronistic?

One can only suppose that the Church is a fossilized institution, which has not lived since the 16th century, dying of uniformity in the second year of King Edward the Sixth. Then all is clear. It is as anachronistic to have gas fittings or hot water pipes, or electric lights in a church as it was to clothe Ivanhoe in armour of the 15th century. Then one can understand why domestic architecture is an art unrelated to the building of churches.

The Aesthetic Treatment of Concrete.

Simplicity of intention in constructional design may issue, says Professor Beresford Pite, F.R.I.B.A., in a native or spontaneous æsthetic quality. For example, an undesigned beauty reached without treatment is often attained by such a structure as the Forth Bridge or a ferro-concrete silo. Again, mediæval architecture grew up as a constructive method without æsthetic purpose, and yet achieved results of great beauty. Consequently, he asked, "Is not the opportunity given by the new process of reinforced concrete building one that could be utilized for the erection of the much-desired original and modern style of architecture? Are the new material and method together sufficient motive?" It had to be asked whether truthfulness of design to constructive purpose and elemental soundness of proportion were in themselves sufficient to provide that pleasantness to the eye which is desiderated. Four conclusions might be safely drawn: First, we have no instinctive guidance towards an unbiassed originality for a concrete architecture; second, abstract principles like those invoked of proportion are of no assistance; third, superficial treatments, as by colour, are insufficient for architectural expression, though valuable in assistance: fourth, the texture of concrete surfaces modifies and imparts special character to any forms employed for architectural purposes. Therefore, while modern considerations of utility and of novel constructional methods determine proportions, and may ultimately develop æsthetic qualities, the scholarly and critical analysis and employment of traditional architectural forms suitably modified for execution in concrete is the proper method for the æsthetic treatment of concrete. A historical review of the development of some characteristics of Egyptian, Greek, and Roman architecture furnishes proofs of the non-relation of æsthetic treatment to direct constructive facts. Idealized representations of ancient types form the basis of both Egyptian and Greek characteristics, while the Romans frankly separated the decorative from the practical purposes of architecture. In Gothic art, however, the constructive craftsman was the artist, and the development of decoration is integral with building craft. In other crafts, like wood and plaster work, motives are imitated from stonework, and illustrate the modifications produced by the texture of the material into the design of details—of this the Elizabethan ornamental plastered ceilings originating from Tudor vaultings are illustrations. Modern novelty of constructive method does not remove a necessity for study of architectural development. The latter will aid adaptation and modification, and thus pave the way for development. Modern Continental design is too eager to demonstrate that elasticity possible in employment of form in unusual architectural relations. At home we still are safely and timidly putting brick and stone fronts to concrete buildings. There is a great future before concrete building, and it deserves that close and patient architectural study which, deriving from the past, will give certainty to the future æsthetic treatment of the material.

Production and Architectural Use of Stone.

Architects, says *The Stone Trades Journal*, should thoroughly familiarize themselves with the various stone and stone quarries of the country, and more especially of the quarries from which the principal stone used for building purposes are obtained. Very few architects have ever visited a quarry district which has a national reputation to see for themselves. They have little idea of the magnitude of the great works, mammoth stone-working machinery and other points of great interest which all architects should know in connection with their profession. The knowledge which they would gain in one visit would be of untold value to them and they would not have to depend wholly on what was told them without seeing.

Great improvement in the appearance of buildings could be made if proper precautions in protecting cut stone before and after it is placed in the building were taken. It should be seen that it is placed on its natural bed as nature intended, the tops of all projecting stone; such as heavy cornice, should be waterproofed, deep drips should be cut for all sills and projecting courses, the backs of parapet walls should also be thoroughly waterproofed; cements that will stain or cause effervescing should be avoided, also brick containing alkali or other injurious property; and under no circumstance should the use of acid in cleaning down be permissible. A little care and there would be less "ratty" looking buildings.

Quarrymen should see that their travelling representatives are men thoroughly posted, capable of offering suggestions, assisting the architects in every way to obtain better results. They should understand the handling of stone and be men having a certain amount of education along architectural lines, so they can approach an architect with a degree of intelligence, capable of answering any question about their material in an intelligent and honest way, and, if called upon, to offer suggestions.

Many travellers spend a great deal of their time telling the poor qualities of other stone, completely forgetting and neglecting to bring out the good points of their own.

The quarrymen owe it to themselves to see that nothing but the very best is shipped from their quarries. Cut stone contractors should be more careful in the matter of workmanship, using discretion in the handling of material and making practical suggestions when beneficial. The architect, instead of confining himself to one special class of material, should become better posted on the large variety of beautifully coloured stone the country affords; their durability and the class of work for which they are adapted. Many stones have been cast aside as unfit for exterior work where handsome results could have been obtained if used for interior decoration. Cheap and inferior materials should always be avoided, and in public buildings appropriations should be made sufficient to enable the use of nothing but the best.

When a material has been tried and found not wanting, its good qualities should be fully appreciated, and therefore does not require any protection or compelling its use.

Wealth seems to be man's whole controlling power, pretentious structures out of cheap and shoddy material may look passably fair to the eye for the time being, but what an expensive proportion this class of work is to the country in the course of a few years!

One grand stone structure to a city is a greater advertisement than a dozen cheap, shoddy affairs which are always passed by unnoticed.

Visitors to our cities form their estimate of the progressiveness of our people by the permanent and beautiful public and private buildings.

We owe a great deal to many of our eminent architects for the magnificent buildings that have been erected in these recent years. They have brought out the beauties of a great many of our building stones for exterior and interior work, where a few years ago they have been passed by unnoticed.

The Registration of Genius.

By H. Guicharde Todd, F.S.A. (Scot.), M.S.A.

T the present moment there are two policies of Registration proposed in the interests of the Architectural Profession—the Registration of Architects and the Registration of Genius. The former policy is clearly defined, and has been advocated for many years, while the latter is the principle underlying the proposed Architectural Copyright Bill which is designed to protect individuality in architectural design as the individual property of the designer.

To protect originality in design may be just at law, but does not appear to partake of that true understanding of the evolution and progress of art which should be a characteristic of the artist and architect.

The Registration of Architects is advocated primarily in the interests of architects individually and as a profession, and to make Statutory Qualification obligatory so that none but trained persons shall be allowed to practise as architects or describe themselves as such. This would not interfere in any way with the freedom of the bona-fide architect in the practice of his profession provided that he did not violate the ethics of the profession, and is a measure generally acknowledged to be, after long consideration, in the best interests of architecture, its exponents, and the public.

Architectural Copyright, on the other hand, appears to be a retrogressive proposal and directly opposed to the natural progress of architectural art or the evolution of a national style of architecture and likely to interfere with the personal liberty of the architect so far as design is concerned. It is easy to conceive the architect, who has hitherto gained confidence from his collection of plates of contemporary work, studying these very plates in the fear that he may inadvertently be absorbing some idea or detail which may lay him open to an action at law, and it is still easier to conceive how such a feeling of nervousness may detrimentally affect his designs. The study of modern buildings would be absolutely necessary in order to ascertain what to avoid, and it is to be presumed that, given Architectural Copyright by legislation, every illustration of modern work published would constitute it the copyright of the person whose name was attached thereunto, or, as is possible under the Bill, the copyright of the building owner. It is also conceivable that architects would not be so ready to publish illustrations of executed work, lest inadvertently they might have assimilated the copyright in a similar work. The bare possibility of such an atmosphere, or even a tendency towards such a state of affairs, must be repellent to all who desire natural progress in architectural art, as the initiation of such legislation would encourage an individualism compared with which the late Art Nouveau period would be a most meritorious phase of art. Every architect (and anyone may be called an architect under existing conditions) would be striving after

The Registration of Genius.

some sort of originality for two reasons at least, to avoid being out of date and being considered a mere copyist by reproducing the works of the past, and to avoid an action at law through any similarity to any modern building protected by copyright. The probable consequent dissimilarity could only be an architectural nightmare beyond description and a development of that piebald art which is the characteristic of any business thoroughfare.

The great majority of architects have necessarily no claims to genius—the profession as a whole being the setting which enhances the distinction of the gifted few, acknowledged to be gifted in proportion to their superiority over the rank and file. But, as the majority necessarily does more work than the minority, it follows that the work of the majority is of greater importance than the work of the minority in carrying on tradition or developing a style, more particularly if the works of the more gifted are not to be taken as guides and to provide a lead towards rational progress.

At the present moment there are many little styles more or less founded on the works, or rather on the interpretations of present-day architects of acknowledged eminence and individuality, but it must be remembered that it is a unity of aim in the adaptation of structural truths, although the individual styles may differ greatly, which gives these architects their eminence and their entrée to the first circle of architectural artists. These men are natural leaders of style, and it is now proposed that they should have no following and that their works of genius or merit should be registered somewhat after the manner of patents. Progress in any sphere has usually been due to men of merit and initiative founding schools of thought and working hand in hand with humbler searchers after truth, who, though probably unable to evolve great improvements, are able to further the object in view and disseminate the principles discovered in actual practice. Mutual dependence between the members of any community or profession must be acknowledged to be the only foundation from which any common aim can be successfully realized. The one aim of all architects worthy of the name is to give true artistic expression to their buildings in proportion to the necessities of the case, an expression not merely pleasing or fashionable for the time being, but as a lasting proof of his careful consideration of the particular problem in keeping with the axioms of good building, and as a model and inspiration to others. The duty of the man of merit and initiative is paternal; his art and its less favoured exponents should have the benefit of his example as well as his precepts as otherwise our open-air lecture room may become full of buildings which say, "Think as my author did, but as unlike him as possible." The paradox is apparent; students of architecture would be led to appreciate the root principles of excellence in architecture and the modern developments therefrom, but in actual practice would be thrown entirely on their own resources. It is true that infinite variety in building is possible, but it is obviously not desirable.

The beautiful terraces round the Regent's Park, the interest of the City of Bath, and the excellencies of the West End and North side of Edinburgh, owe their success to comparative similarity of treatment and unanimity of aim; while the assorted treasures of Oxford Street and Cheapside are due to the evident desire for individual predominance at all costs. Addison said, "It would be a happy thing if such as have real capacities for public service were employed in works of general use," and yet, the leaders of architectural thought who approve of Architectural Copyright seek to make it natural for the mediocre practitioner (who will never be quite eliminated even under Registration), to rely on his own ignorant or debauched taste for his inspiration instead of adapting or assimilating ideas from contemporary buildings. His work might possibly be without beauty but would probably have some slight reflected merit which would be a step forward in the line of progress rather than a retrogressive step with worse to follow.

The report of the R.I.B.A. Committee on Copyright says, "It must be borne in mind that the protection of design in architectural work is as yet an entire novelty in this country, and a moderate attitude is advisable for the present," but the Registration of Architects is also "an entire novelty in this country," and a moderate, dignified, and advisable attitude with regard to architectural policy appears to require legislation for the architectural profession in one Bill only, leaving to the profession (through the Council of its governing body), the management of its own affairs as regards "piratical copying" or any other unprofessional conduct. The year 1911 is giving a "united" profession, and Bills for Copyright and for Registration, but a united Bill would be more likely to ensure a really united profession. A wise Registration Bill would render an Architectural Copyright Bill unnecessary, as infringement of Copyright could be treated as unprofessional conduct, and make the offender liable to be struck off the roll.

It has been said that "the wisdom of one generation will be folly in the next," and it is likely that the next architectural generation will bless the present for initiating a well-nigh unalterable establishment of legal control of matters which are purely architectural and artistic.

Art is essentially imitative, and a national style of architecture can only mean a style with certain essential points of similarity founded on, and expressive of, national feeling and life, a style to be carried on to an ever elusive perfection only by artists who are free from jealousy and professional selfishness and unhampered by such legislation as is proposed in the Architectural Copyright Bill.

Supporters of the Bill appear to have taken up an extraordinary position. They promote it ostensibly in favour of art, whereas, the most obvious point is that Copyright in architecture is to be a marketable commodity with a definite value to be carefully detailed in the R.I.B.A. scale of charges. This is distinctly in favour of the architect who owns the Copyright, but is it of advantage to art itself?

The policy appears to be mercenary in the extreme, and, just as freehold property now entitles its possessor to the respect of his less fortunate fellowmen, so will Copyright in Architecture in the future make it possible for the less fortunate members of the architectural profession to point with awe to the successful architect, and describe him as "so-and-so, the greatest living owner of Architectural Copyright, worth fabulous sums embodied in piles of buildings which must not be studied in any really practical way until fifty years after his death, and also the owner at law of his late father's great heritage of Copyright with thirty or forty years to run, and President of the Copyright Trust lately formed to buy up Copyright to be sold to architects only."

Many architects have objected to the policy of Registration and fought against it for years as being opposed to freedom in art, and yet, the Architectural Copyright Bill has been allowed to reach its present stage with hardly any real opposition, and with criticism confined almost entirely to the details of the Bill itself. The artistic principles involved have received scant attention, although some architects have shown that serious thought is necessary.

Mr. Sidney D. Kitson, F.S.A., F.R.I.B.A., in the discussion in *Country Life*, says, "The question of Copyright in architecture is far more complicated than a similar question in any of the other arts, for architecture is the most imitative of them all, What is wanted, I venture to think nowadays—at any rate in the provinces—is less effort after originality and more scholarship, *i.e.*, more trained ability to imitate intelligently and adapt the spirit of the best of modern as well as of ancient work. It therefore seems to me that the legal protection of architecture can do but little good, and may actually do harm to the orderly evolution of architectural design."

Mr. Ernest Newton, A.R.A., F.R.I.B.A., says, "I think Architectural Copyright would be embarrassing to the architect and fatal to the natural development of architecture. If an architect's work is sufficiently interesting to influence others intelligent plagiarism is all to the good."

Mr. R. S. Lorimer, A.R.S.A., F.R.I.B.A., in the same discussion, says, "the more educated and discriminating the public becomes, the less will the real architect need to be protected by Copyright."

Mr. C. H. B. Quennell, F.R.I.B.A., says, "I fail to see how it will work, and the good that can be expected to result," and Mr. Reginald Blomfield, A.R.A., F.R.I.B.A., says, "In countries and in periods where a definite tradition and standard of architecture exists, such a tribunal might be possible and desirable. Unfortunately, we have yet to form our tradition and standard of architecture."

The moral appears to be what it has always been regarding architectural art—education—carefully devised and absolutely free from restraint as regards all buildings of merit whether ancient or modern.

The Registration of Genius.

The Registration of Architects is one policy, and the Registration of Genius is another. The genius already has great possessions. He has that invaluable faculty of invention which raises him above less favoured individuals. He is able to produce original works of art, is a master, and ought to be a tutor and try to instil into others that appreciation of excellence for which he himself is not responsible but only the curator, the medium by whose knowledge of 'principles the great majority may benefit.

It is proposed to protect Architectural Copyright in the interest of the genius—the only man qualified to initiate any great or valuable innovation or development of style, the only man who can, by his own natural personal work, win wealth and honour for himself, or spur on or incite others to great exertions of professional emulation.

Professional competition and competitions have necessitated elaborate codes of ethics, and yet, it is proposed to introduce another disturbing element into the professional atmosphere. Copyright is opposed to any feeling of fraternity in the architectural profession and as proposed will be a professional matter managed by the law of the land and not by the law of the fraternity, and furthermore it is proposed in favour of those who are most able to look after their own interests, and appears to be diametrically opposed to the rational progress of architectural art.

Burke said, "Ask of politicians the end for which laws were originally designed, and they will answer, that the laws were designed as a protection for the poor and weak against the oppression of the rich and powerful."

Mainly about Members.

A new Church at Honley, designed by Messrs. W. J. Morley & Son, Architects, of Bradford, has been erected at a cost of over £4,000, and was recently opened.

A new Chapel at Cardiff has been erected at a cost of £5,300 from plans prepared by Messrs. Habershon, Fawckner & Co., Architects, of Cardiff.

Mr. P. G. Fry, Architect, Weston-super-Mare, is the architect for the Church of St. Paul, about to be erected at a cost of £10,700 in the Parish of Emmanuel, Weston-super-Mare.

Mr. W. F. Bird, of Somerset, is the Architect of a New Chapel, which is being erected at a cost of £2,100. The accommodation will be for about 300, and there is also a Sunday School annexe.

Competitive designs for the proposed new School at Gosport, were submitted by Mr. H. A. F. Smith, Mr. W. H. Fry, Mr. L. M. Field and Mr. E. J. Thomas, P.A.S.I. The U.D. Council considered the plans of Mr. H. A. F. Smith the most suitable for the purpose, and have appointed him Architect.

Mr. John Speak, of Kirton, near Boston, Lincolnshire, is about to erect buildings at Mountain, Queensbury, to be used as a village institute. Reading rooms, tea rooms, billiard rooms, baths, gymnasium, etc., will be provided. Mr. Herbert Hodgson, A.R.I.B.A., Bradford, has been instructed to prepare plans for the building.

The new Elementary and Special Schools recently erected at Romford were recently opened. The buildings consist of eight class rooms, two assembly halls, manual instruction room, teachers' rooms, medical inspection rooms and four cloak rooms. The contract price for the building was £5,567, and the architect was Mr. A. S. R. Ley, of 214, Bishopsgate, E.C., and Frinton-on-Sea, Essex, who also designed the new Council schools, accommodating 520 boys and girls, and a cookery centre, now being erected at Maldon, at a cost of £6,100. Mr. A. S. R. Ley's competitive design for a Council School at Heybridge is hung in the Royal Academy Exhibition.

An interesting gift has been made to the Corporation of Carnarvon by Mr. Walter W. Thomas, J.P., Past President S.A. Mr. Thomas had in his possession a beautiful engraving of Carnarvon Castle, taken from a painting by a famous artist, and a few days ago he forwarded the work to the Mayor of Carnarvon, who has accepted it on behalf of the Corporation. The picture will be hung in a prominent position in the Guildhall and will form a valuable addition to the treasures of the ancient Welsh borough. The gift, which is intended as a memento of the investiture of Prince Edward as Prince of Wales, gives a splendid view of the ancient castle as seen from Vaynol Park, with the balcony from which his Royal Highness will be formerly presented to the Welsh people.

The Journal of The Society of Architects.

Sir Ernest George, A.R.A.

No Coronation honour has been more deservedly bestowed than that conferred upon that distinguished artist and architect, Sir Ernest George, Past-President of the R.I.B.A., and Royal Gold Medallist.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Registration in Australia.

The Annual Report of the West Australian Institute of Architects states that the question of Registration and Statutory Education has again received very serious consideration during the year, and the Institute having decided to adopt the Board System, a Bill was drawn up on the lines of the Medical Practitioners' Act, and the Dentists' Registration Bill.

The State Government have promised to discuss the principle of the Bill with a view to making it a Government Measure next Session.

Sketching Parties.

The following arrangements have been made for July. Communications and enquiries should be addressed to the Hon. Secretary of the Students' Section, Mr. C. H. Hudson, 12, Almeida Street, Islington, N.

Saturday, July 8th. Visit to Stone Church. Party leaves Charing Cross for Dartford, at 2.5 p.m. Fares, 1/10 return. Arrangements will be made for Tea at 1/- per head, to be paid for at the time.

Saturday, July 22nd. A visit to Oxford will be organized provided a sufficient number notify Mr. Hudson before July 17th. The return Railway Fare for a small party is 6/8 each, but would probably be considerably less for a large party.

Library Books.

The Hon. Librarian will be glad if Members or Students who have books on loan will kindly return them to the Secretary so that the Revision of the Catalogue may be proceeded with.

Journal

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New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Society and the R.I.B.A.

Arrangements for the next Session.

The reference in our last issue to the then position of affairs in regard to the proposed fusion of the two bodies, leads the *Building News* to take exception to the use of the word "abeyance" in this connection as regards the work of the Society.

At that time however "a state of suspense" accurately represented the situation, both in this connection and also under normal conditions, seeing that most professional bodies suspend their activities during the summer months.

The negotiations between the Councils of the Royal Institute and of the Society are proceeding, and members will be duly notified, after the recess, of the position of affairs.

In the meantime the work of the Society in regard to the election of new members (which is always in abeyance during the summer), and all its other activities, will be resumed as usual in the autumn.

The examinations will be held early in October, the Annual General Meeting will take place on October 19th, and all the arrangements for the new Session have been made, and entered into, and until the resolutions passed by the general body of members in regard to the proposals between the Society and the R.I.B.A., or to be hereafter passed, have been confirmed, the position of members of the Society is unaffected.

Government Architecture in the East.

Indian Architects for India.

The paper read before the East Indian Association by Mr. J. Begg, F.R.I.B.A., Consulting Architect to the Government of India, is described by Indian Engineering as a forceful plea for establishing in India a strong school for the study of architecture, this being the one calling that for some reason or other has long languished and, according to Mr. Begg, will continue to languish long after law, medicine and engineering have risen to a rank that will do without the leadership of the West. We are quite in agreement, says the writer, with Mr. Begg as to the approaching independence of the first two; but we think that the position of architecture in relation to engineering at the present day is solely due to the official neglect of the former. Neither the one nor the other made any headway, both in fact fell into practical oblivion, when dynasties began to tumble down and the old order to disappear at the advent of the British. With the restoration of order the British Government gave a stimulus to engineering as the more necessary to its material needs, and has only now begun to wake to the fact that it might do with some architecture as well. Engineering in its modern development has thus had a long pull ahead while architecture has not been given a chance, and the impression naturally prevails that there is not a favourable soil for it. But let us read the opening words of Mr. Begg's lecture itself, and see what it suggests: "I confess to having had a strong temptation to attempt an address on the architecture of India from the more purely archæological point of view. Though I have no wish to associate myself with those who are accustomed habitually to laud the ancients at the expense of the moderns, yet I cannot help admitting that, so far as India at least is concerned, it is decidedly the ancients who 'have it' in the matter of architecture. It would seem like a flagrant neglect of opportunity even to omit to consider those glorious examples of the work of the past which make India unique among the countries of the world in the possession of architectural gems of the highest possible order of merit." These words surely mean that architecture in its very highest form is bound up with the genius of the people, and that it is at present dead only because it is neglected. Unlike all other critics, Mr. Begg has a good word for the architecture of the Public Works Department, saying: "I do not want to pretend that the architecture of the Public Works Department has been contemptible. It has not been so. Many of the more important buildings of India, if not looked at too closely in detail, though, of course, in a sense amateur work, are distinctly above the average of such work." This is generous to the Department, but we fear it applies only to such buildings erected by the Department which were designed by architects or by engineers who from an early

age specialized in architecture. Among the older buildings of Calcutta neither the High Court nor the General Post Office, for instance, was designed by an engineer, though built by the Department, and among later ones all worth looking at were designed by men who, though they came under the generic term engineer for convenience of grading, were really architects, by specialization. And the High Court and Public Works Secretariat of Bombay, noticed with appreciation, may have had a similar origin, but we do not know it as a fact.

It is only ten years ago that the various Governments began to keep a Consulting Archit ct, and we now have seven of them, whose complaint is that the scope of their duties is extremely limited. For long they were permitted to do no more than turn out a presentable façade, while the planning and entire conception of the building lay with the engineer; but there has been some improvement recently, for we now find it is the architect who prepares complete plans, specifications and estimates, and is even permitted to visit his growing creation at intervals when his criticisms and advice may, or may not, be followed. In Mr. Begg's own words: "I think that, had we taken our official superiors at their word from the first, had we not, in spite of frequent discouragement, followed our own line to some extent, the office of Government Architect would have been a sinecure indeed "—in these words, we say, we might read a struggle between Government and its architects in which the latter have partly won. But much remains for them to fight for. For instance there is a well-founded complaint that there is no reliable source for the supply of capable assistants.

Three years ago, when we had some correspondence with Mr. James Ransome, just before he retired from the position of Consulting Architect to the Government of India, this was his very complaint. He was kept at his work with the help of draughtsmen only, and was unable to get the Government of India to sanction the attachment of an assistant to his office. Government is, however, only now considering this difficulty, but has not made up its mind, although the way is open. It vacillates between the proposal of establishing a system of pupilage in the existing architect's offices and the proposal of sending Home approved architectural pupils to complete their studies in Europe. Why does it not take the clear course when such a clear opportunity is offering for opening a fine career to men of the country? Why does it not open architectural classes in the engineering colleges of the country. and from these draft men direct to the offices of its architects to undergo a course of practical training? What else is done in England? We are emphatically opposed to the idea of introducing here another of those Imperial and Provincial Services which cause so much discontent, and are in fact out of date. Think of the anomaly in this special instance. Here is a country possessing a wealth of architecture pronounced unrivalled by anything in ancient or modern times. It is desired to revive it. To do so is it necessary to bring in architects from a land 6,000 miles away in order to teach those on the spot what they must do? We have the colleges and the

Government Architecture in the East.

material on the spot and need only the training. The training should therefore be given here in the very country where this fine architecture exists, and if thorough, it will lead to higher results than one that is not indigenous. There is an unrivalled opening, strongly demanded for a new career, and we should like to see Government for once bury its prejudices and respond generously. Here are the words of its own Consulting Architect: "It would be a great thing for India if she could be put in the way of having a strong architectural profession of her own, and of being more or less self-contained in the matter of providing its *personnel*." Does this mean Imperial and Provincial Services? We think not.

The October Examinations.

The examinations to qualify for Membership of the Society will be held as usual in London and also in provincial centres, in the first week in October.

Copies of the new syllabus may be obtained on application to the Secretary.

The following are the sections and subjects:

Section I. ARCHITECTURE. Planning, design, architectural history.

II. BUILDING. Construction and materials.

,, III. PRACTICE. Contracts, specifications, quantities.

,, IV. SANITATION. Ventilation, drainage, water supply, etc.

Students of the Society may take the examination by sections at a fee of 15s. for each section, or in the case of students who are 21 years of age or over, the whole examination at one sitting for a fee of one-guinea-and-a-half.

Certificates of proficiency will be awarded in those sections in which a Student candidate qualifies, or a full certificate as the case may be.

A holder of the four sectional certificates of proficiency issued by the Society, or their equivalent in certificates of exemption, who has attained the age of 21 years, may apply for the full certificate entitling the holder to make an application for membership.

Pending the completion of the negotiations with the R.I.B.A., the possibility of this examination being the last to be held by the Society should be borne in mind by intending candidates.

Art and Socialism.

Mr. H. W. Wills, A.R.I.B.A., in support of the view that socialism means the extinction of fine architecture (a matter debated at the A.A.) seeks first to arrive at the meanings of "Art" and "Socialism."

Art has been said to be the kind of activity which produces beauty. But when we seek further and ask what beauty is, definitions become somewhat complicated, there being two main divisions of opinion—one that beauty is something having an independent existence, that it is one of the manifestations of the absolutely perfect, of the idea, of the spirit, of will, or of God, a definition accepted by Hegel and Schopenhauer and many others; the other, that beauty is a kind of pleasure received by us not having personal advantage for its object. This has been stated as being the view of the nature of beauty more commonly held now.

The greatest of all tests of a work of art is that it should stand the test of time and please succeeding generations, who naturally look at it from a more critical and detached standpoint than we can now. Quite half the work carried out during the last century fails in our art at least to reach any such standard, and we may perhaps be wise in asking ourselves whether much of the work we look on with more or less complacency now really reaches a much higher standard.

Mr. Wills finds a difficulty in defining Socialism. Some, he says, put it as an attempt to apply the ideals of Christianity to the realities of life. Others liken it to an organized and legalized system of appropriating for the use of the ignorant and unfit what has been industriously acquired by individuals, but for purposes of his contention he accepts the definition that Socialism means the nationalization of the means of production and distribution and the consequent additions to bureaucracy, the multiplication and complication of governmental and municipal control, and the appropriation of what may be claimed to be legitimate fields of private enterprise for the supposed benefit of the community.

Capitalism seems to him to have no direct or indirect bearing on the invention of printing, but the latter has a very direct bearing on the art of illuminating and of lettering. The illuminated missal was a more beautiful object than the early book, and in each successive cheapening of method of reproduction something has been lost which can never be regained. Yet books are at least as necessary, if not more so, to the poor man than to the rich.

He agrees with William Morris in his contention that the workman who made a complete article instead of a small part of one was engaged in pleasanter and more interesting work, but he believes our working classes would resent as much as the capitalist the destruction of labour-saving machines.

The iron ship and the locomotive, with all the changes in our lives which they

involved, were inevitable when the first man conceived a method of utilising steam, but the abolition of the Spanish galleon and the China clipper represent losses to art, while the motor car is no compensation artistically for the stage coach.

Can anyone believe that a Norman baron well on in life and growing stout, would have objected to a first-class lift or to the electric light? And yet few of us can imagine a really picturesque thirteenth century lift enclosure.

There is what he considers a very great illusion founded on a fact, which is very firmly held by many, amongst them William Morris, which is, that a decay of art has taken place simultaneously with the development of modern industrialism, and that this decay is to be put down to what is called capitalism. This contention is buttressed up by the fact that such a decay has taken place in many of the handicrafts since the middle ages, that the great majority of our buildings are less beautiful, that our workmen can no longer be left to produce works of art unguided, and that our pictures no longer possess the intense meaning and realism that they did in the past. With all these facts Mr. Wills agrees, but with the conclusion many draw from them he entirely dissents, expressing the view that the conditions of modern life render the production of artistic work much more difficult, inasmuch as men's energies are more diversely employed, throwing more and more work on the designer, but he does not think this has anything to do with the relations of labour and of capital, nor does he believe the question of morals comes anywhere into the argument.

We are, in fact, centuries beyond the point at which a mason might help our buildings by some gargoyle or keystone, and we have to think out our problems with less reliance on chance.

We are bound to lose in many directions. Locomotion has largely destroyed local colour. It is absurd any longer to refuse to use steel because we cannot secure mediæval effects by its aid, or to adopt hand-made locks or latches for the sake of their picturesqueness when we can obtain something infinitely more serviceable at a fraction of the cost by the aid of machinery.

Painters and sculptors have, fortunately, an easier task before them, their work being imitative; but we have to face a certain loss in all those branches of art in which machinery, its methods of indefinite duplication, can readily be made use of.

The only way in which what is lost in one direction can be gained in another is in greater thought being given, and greater skill displayed, in the disposition of masses and spaces and in reasoned beauty of line.

So much for the causes which Mr. Wills thinks have been sufficient to produce a deterioration of artistic quality in modern work without the introduction of other reasons. His forecast of the probable result of a system of so-called Socialism is a state of local autonomy whereby the rising generation would be handed over to the L.C.C., and those with an aptitude for drawing, would after a spell at one of the

many schools of arts and crafts, be sent into the architects' department, by that time swelled to many thousands, housed in palatial offices several miles long.

This may be an absurd and exaggerated picture, but there are indications that the trend of events are in some such direction in this country. The L.C.C., for instance, employ an architectural staff of something like 300 men, and carry out their own schools, asylums, fire stations, generating stations, schools of arts and crafts, and housing schemes. Most counties, including the great counties of Lancashire and Yorkshire, have their county architects. In one county the official architect has carried out the Sessions House, a home for inebriates and a county asylum in addition to the other work. In another case the architect was in one year called on to report on something like 30 cases where alterations or new schools were required.

The majority of the new county education authorities employ their own architects. The towns of Nottingham, Bradford, Sheffield, Manchester, Edinburgh, Dundee, Worcester and many others have their own architects. This is the thin end of the wedge of Socialism as it affects our own art, and it only remains to discuss the merits and demerits of such a system, the next step being to fight it root and branch before worse befalls us.

Anyone who studies history will agree in coming to the conclusion that most great events have been achieved by the superman and not by the mass, in support of which view Mr. Wills quotes the achievements of Napoleon, Washington, and Hannibal.

In the arts, what really is most distinctive of London as opposed to any other capital is due to the work of Wren. The great Italian Renaissance was inaugurated and carried to its height by a comparatively small number of despotic princes and the artists they employed. No accident of birth or adverse surroundings can bind a genius. Turner was a barber's son, the great astronomer, Halley, a poor musician playing for hire and grinding optical glasses in his leisure time. The greatest sailor this country has ever possessed was a man of feeble health who was always sick at sea.

The average man is and probably will always be, commonplace in his tastes, halting and feeble in his performances.

We cannot manufacture genius, but we can, by the aid of socialistic legislation, so take away his opportunities that he has no field, and we must all remember that the more a man is conscious of great gifts the more he will long to gain the individual credit of showing what he can do, and the more he will want independence.

The greatest architect who ever existed, if at the head of an official department, has too much organization and routine duties to attend to to exercise his powers of design. His assistants will know they are not likely to get full credit for what

they may do, and the mass of them will relapse into doing a moderate day's work for a moderate day's pay.

Most of us want the spur of necessity to do our best, and the greatest possession of any of us is not what we have or what we can ever attain, but that hope which springs eternal. We believe there is a possibility of reaching the mountain tops of absolute achievement. If it is in many cases an illusion it is even at that worth every certainty of life many times over.

And there is another point of view, which is that the dull world (for a Socialist world would be a very dull one) will not supply anyone with the colours for his canvas, be it that of a painter, a sculptor, or an architect. We all need contrasts as a background. A city of palaces, though often spoken of, has, he believes, never existed, but it is very easy to imagine a city of model dwellings from which we should be glad to fly.

The "Journal" and its Uses.

The Society's *Journal* is intended as a medium whereby its members may be kept in touch with its proceedings and with each other, and also to some extent, (limited by space and other considerations) with matters of general interest or importance affecting the profession generally.

It is found in practice that to some extent members fail to avail themselves of this medium of information and prefer to seek it first hand from the Secretary. In so doing they are not alone, as we think it will be found that with few if any exceptions, the members of professional institutions might with advantage make better use of their "Proceedings" than is at present the case.

If however the Society's *Journal* fails in some instances to fully realize its objects in diffusing useful information, it succeeds in others, for it not infrequently happens that articles are "lifted" bodily by other Journals, or adapted for use in their columns, in some cases without any acknowledgment.

The most recent apparent instance of this is the striking resemblance between an original article on "Sundials," by Mr. Henry Walker, published in our February issue, and an article on the same subject in the current number (July) of the Architectural Review, the author of which modestly omits his name, as well as any reference to the source (if any), of his inspiration. Presumably he had none, and the effort was original, in which case it is merely a matter of coincidence and we have been misled in supposing that he was in any way indebted to the Society's Journal.

The Stability of St. Paul's.

The agitation which took place three years ago over the stability of St. Paul's Cathedral has been to some extent revived by the consideration of the proposals of the Corporation in regard to the new bridge over the Thames.

Mr. Macartney, whose paper on the subject we referred to at the time, has in a communication to *The Times* made the following statement in regard to the proposed Tram Subway under St. Paul's Churchyard:—" The Cathedral unquestionably is the heaviest building in London, with wide, untied spaces, and its stability depends upon an immovable foundation."

Any misgiving about its stability should have a salutary effect upon minds dulled to the beauty and dignity of St. Paul's by over-familiarity. It seems that our great buildings have to be humanized in some way before their worth or romance can be vividly realized. If, for instance, it were proved that Shakespeare drank punch in one of the old houses in Holborn Viaduct, that house would be scrutinized as it has never yet been examined. The discovery would not alter the house, of course, but it would impart a sentiment to the structure that would individualize it above its fellows.

So with St. Paul's. If we could actually see Wren busy among the ruins of the ancient structure, stepping over the smoke-blackened stones as he instructed the clerk of works, an enhanced interest would accrue to the sacred pile. Fortunately some such records exist in a rare and out-of-print book, Constitutions of the Ancient and Honourable Fraternity of Free and Accepted Masons. The writer is James Anderson, and it was printed for Brother J. Scott at the Black Swan, in Paternoster Row, 1756.

Some of the records not only remove a good deal of dust from pages of history relating to the condition of London immediately after the Great Fire of London, but provide what appear to be first-hand impressions of the difficulties Sir Christopher Wren encountered when entrusted with the task of rebuilding the Cathedral.

That the great architect was a Freemason few members of that fraternity need to be told. In 1666 he was appointed Surveyor-General and principal architect for rebuilding the whole City. Letters patent were issued by the King in 1673 authorizing "several lords, spiritual and temporal, and other persons of eminent rank and quality" to proceed with the undertaking.

At the very outset of the work, according to the authority cited above, an incident of happy augury occurred. In person Wren had set out upon the site the dimensions of the great dome and fixed upon the centre. A labourer, ordered to take a flat stone from one of the heaps of masonry to form a mark for the masons, took at random a piece of a gravestone, with the one word "Resurgam" remaining of its inscription.

Before this many difficulties had been met with. The walls of the ancient Cathedral, 80 ft. in height and 5 ft. thick, presented a tough job to deal with to men only armed with pickaxes. As they plied their tools labourers below removed the stone. Want of room made this plan of operations slow and dangerous. The heaps grew steep and large, and several lives were lost in the hazardous undertaking. Considerations of economy guided the builders, too, for, the City having streets to pave anew, they sold the Kentish rag which had been accumulating to the authorities for metalling the roads.

"The surveyor," acting according to James Anderson's or Wren's instructions if then placed scaffolds high enough to extend his lines over the heaps that lay in the way; and then by perpendiculars set out the places below from the lines drawn with care upon the level plan of the scaffold.

"Thus he proceeded, gaining every day more room, until he came to the middle tower that bore the steeple. The remains of the tower being near 200 ft. high, the labourers were afraid to work above. Therefore he concluded to facilitate the work by the use of gunpowder. He dug a hole of about 4 ft. width by the side of the north-west pillar of the tower; the four pillars of which were 14 ft. in diameter. When he had dug to the foundation with tools made on purpose, and wrought a hole 2 ft. square level with the centre of the pillar, he placed there a little deal box containing 18 lb. of powder. A cane was fixed to the box with a quick match within the cane, which reached from the box to the ground above, and along the ground was laid a train of gunpowder, with a match. After the mine was carefully closed up again with stone and mortar to the top of the ground, he observed the effect of the blow. The powder not only lifted up the whole angle of the tower, with two great arches that rested upon it, but also two adjoining arches of the aisles, and all above them: and this it seemed to do somewhat leisurely, cracking the walls to the top, lifting visibly the whole weight by 9 in., which, suddenly jumping down, made a great heap of ruin in the place without scattering. It was half a minute before the heap already fallen opened in two and three places and emitted smoke."

At this stage of the proceedings Wren was called away, probably to the Portland quarries, from whence all the stone for the new St. Paul's was hewn, as can be seen to this day, for on the west shore of Portland there are still blocks of stone bearing the great architect's mark—stones which the builder rejected. About this time Wren represented the adjoining borough of Weymouth in Parliament. While business in Wessex engaged his attention, the management of another mine was left to a subordinate, who, too wise in his own conceit, put in a greater quantity of gunpowder, and, according to the chronicler's complaint, neither went low enough nor sufficiently fortified the mouth of the mine. Though the explosion had the desired effect, it also had an unforeseen result. One stone was shot out to the opposite side of the

churchyard through an open window into the room of a private house where women were sitting at work. Fortunately no one was injured, but the neighbours were so alarmed that they petitioned the builders not to explode mines below their windows.

The clerk in charge then fixed up a battering-ram—a strong mast 40 ft. long, arming the bigger end with an iron spike. Suspending it to a triangular prop, thirty men, fifteen aside, vibrated it against the wall for the whole day, with little apparent success. The workmen were discouraged, but, inspired by hope of double pay, returned to the attack on the second day, when the wall trembled at the top and in a few hours fell. All the remaining walls of the old Cathedral were levelled in this way.

During the progress of laying the foundations Wren met with one unexpected difficulty. The foundations, begun from the west end, had proceeded successfully through the dome to the east end, when, "in prosecuting his design at the north-east corner, he fell upon a pit where all the pot earth had been robb'd by the potters in olden time. There were discovered quantities of urns, vessels, and pottery-ware. He wanted but 6 ft. or 7 ft. to complete the design, and this fell in the very angle, north-east." Wren knew that there was no other good ground under the layer of pot earth until he came to the Thames low-water mark, 40 ft. lower. He sank a pit 80 ft. square, warping up the sand with timber, till he came 40 ft. lower into water and seashells, composing a firm sea beach. This was bored through to the original clay. Then "he began from the beach a square pile of solid, good masonry, 10 ft. square, till he came within 15 ft. of the present ground. Then he turned a short arch underground to the former foundation, which had been broken off by the untoward accident of the pit."

The preliminary work done, a great masonic ceremony took place. "The King, with Grand Master Rivers, his architects and craftsmen, Nobility and Gentry, Lord Mayor and Aldermen, Bishops and clergy, in due course levelled the footstone of new St. Paul's, designed by Deputy Grand Master Wren, A.D. 1673, and by him conducted as Master of the Works and Surveyor, with his Wardens, Edward Strong, senior and junior, upon a Parliamentary fund." When the whole building was complete many years later Wren was too enfeebled with age to attend the dedication service.

Even now we cannot properly appreciate the grandeur of his conception. This cannot be recognized until an unobstructed view of St. Paul's is obtained, for at present the Cathedral, crowded about with houses, is like a great idea clouded by trivial impressions. Perhaps the Royal Institute of British Architects will convince the City Corporation that a national boon will be conferred upon the nation by the creation of open spaces around St. Paul's. Wayfarers would then be astonished by a sight that had once been too familiar.

Acoustics of Buildings.

A Difficult Problem.

The subject of acoustics of buildings, says Mr. A. E. Brooks, is notoriously one of the most difficult in the domain of practical architecture. "No one knows anything of it," wrote J. Guadet, "and results are matters of fortune. Certainly there are not wanting very scientific treatises on the subject, but they very scientifically arrive at conclusions diametrically opposed; they annul one another, and nothing remains." This statement is a semi-humorous exaggeration, for there is undoubtedly a scientific basis for the inquirer to work upon; but there are so many variable factors that absolute results are hardly realisable.

There are some general laws of acoustics that must borne in mind. Sound is the ulterior consequence of a rupture of the static molecular equilibrium of a body. Sound propagates itself in the air by spherical waves due to the disturbance produced in the molecules of this fluid by various causes. In finite spaces the undulatory oscillations reverberate from the walls they strike, and are intensified. Reflection of sound is more perfect and complete in proportion to the smoothness and resistance of the walls. Sounds have an intensity more great in the direction of their emission; hence all places situated at an equal distance from the point of emission will not hear as clearly. The portions of a church, for example, behind a pulpit, are necessarily at a disadvantage. In some buildings there are produced untimely reverberations, rarely useful, mostly troublesome. The sound waves combine, and cross; the reflections become slow and engender confusion. If a pulpit be placed at the crossing in a large church, there is about a preacher a great mass of air, itself detrimental. Beside him, above him, and behind him, are many cubic feet of air, which vibrate sonorously under the influence of his speech. This mass is fruitlessly set in movement, and causes its own vibrations and fatiguing resonances, all objectionable. The roof, too, may enclose masses of air, which produce unwelcome resonances and echoes. The walls reflect the waves, and produce echoes at certain points, that is at points of concentration or conveyance.

In the open air we hear almost solely by direct perception of the sound. If one person speaks to another at say, ten yards distance, the hearer receives the sound in a direct line after an interval of about one thirty-fourth of a second of its emission, for sound travels about 340 yards per second. The sound is not multiplied; the sonorous rays which pass by the auditor are lost in space. There is, however, a certain reinforcement due to reflection from the ground surface; if especially this surface is smooth, if paved for example.

Within a building the case is otherwise; here the auditor first perceives the sound that has come in a direct line from the orator. But, further, the sonorous

rays passing beside the auditor have encountered the walls, ceiling, and windows. These vagrant rays are returned by the surfaces in question, and a portion of the reflected sounds reaches the auditor a little after those that reached him direct.

If this interval is short enough not to be appreciable, a bundle of sonorous rays, although striking the ear in reality in succession, produce a single sound effect, but of greater power. Hence one hears better in a hall than in the open, and still better if the walls are of material that reflects sound well, of wood for example.

But if between the arrivals at the auditor of the direct sound, and of the reflected sound an appreciable interval elapses, there is an echo, or redundancy, and the hearing loses in clearness what it gains in volume. It is a repeated sound, and no longer a reinforced sound.

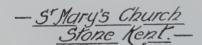
Hence it is not distance which leads to duplication of sound, nor to sound which, without being distinctly doubled, is sensibly prolonged. Nor do excessive distances cause trouble if the walls are reflective; nor is it necessary to suppress the return of reflected sounds. But it is necessary that the reflected sound makes one with the direct sound.

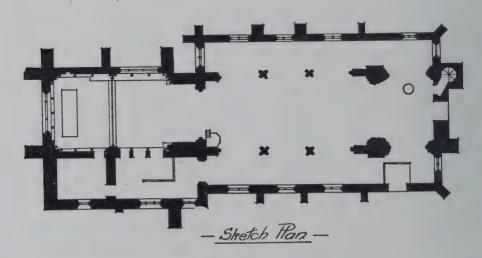
The defects commonly developed are: Insufficient or excessive loudness, and indistinctness due to excessive reverberation, which are mainly results of the shape of the building. The next defect, indistinctness, due to sound interference, is mainly due to conditions at the back of the auditorium, and may be remedied by preventing the rear wall from deflecting sound into the audience, an object attained by covering the wall with sound-absorbing material; it is possible to absorb as much as 80 per cent. of sound. Echo is really an exaggerated case of interrupted reverberation, the belated return of a certain sound or group of sounds. The remedy is the use of an absorbent on the wall which produces the echo.

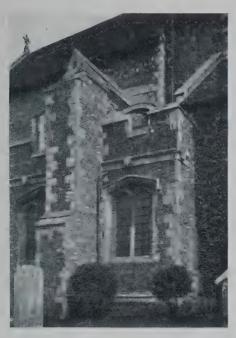
The use of spherical sound boards above a speaker is often a weariness to him, for the sounds he emits are thrown back deafeningly, and prevent him judging his tones. If sounding boards are adopted, the surfaces should be reverbratory, that is, smooth and polished, and constructed of materials solid and resistant, not vibrant. The surfaces should be parabolic, and so devised that the voice is impelled towards the auditory, and in the direction of the length of the edifice, the last provision becoming imperative if part of the audience is behind the orator. It may be assumed that the orator should be near a reverberating surface, which will give his voice an immediate reinforcement. The sound thus primarily reinforced is thrown towards the audience, and borrows in its course some further reinforcement from the floor and other surfaces.

The Society of Architects' Students at Stone Church.

A very interesting visit was paid, on Saturday afternoon last (July 8th), says the Building News, by a party of students and members of The Society of Architects to the well-known parish church of St. Mary, Stone, between Greenhithe and Dartford. The edifice is now easily accessible from the latter town, being close to the terminus of the Horn's Cross electric tramway from the Market place. The party, who were under the guidance of Mr. Norman G. Harland, took this route, and on arriving at the church speedily set to work with sketchbook and camera. The church was drastically restored in the early seventies of the last century by the late Mr. G. E. Street, who advanced the theory that it was designed by the architect for Henry the Third's rebuilding of Westminster Abbey, from the likeness of many of the fenestration details in the two fabrics. Stone Church consists simply of a nave of three bays, with north and south aisles under one lean-to roof, extending to the west face of the tower (which has projecting from the west front, just south of the door, a massive square staircase turret of flintwork, carried to the full height of the main structure), a much loftier chancel, now groined in stone, and a Tudor chapel added to the north side of the chancel by the Wylshyre family (c. 1546), and now utilised as a vestry and organ chamber. The external walls are of flint, patched here and there with







PERPENDICULAR WINDOWS, NORTH WALL OF ORGAN CHAMBER.



THE TOWER.



SOUTH AISLE.



EARLY ENGLISH WINDOW, TRANSITIONAL DOORWAY, NORTH SIDE SOUTH AISLE. of Tower.

(From Photographs by Mr. John Todd, Member). THE SOCIETY'S VISIT TO STONE. Caen freestone and brickwork of various dates, with a rendering of decaying plaster on portions of the chancel; the embattled parapet of the squatty-proportioned engaged tower is evidently a modern rebuilding, and the roofs are tiled. The whole effect of the building, especially from the north-east, is exceedingly picturesque. The two doorways to the nave, in the west front and on the north side, have happily escaped restoration; the former has long lost the little shafts which carried the foliage caps in either jamb, and the latter exhibits a unique blending of Late Transitional and Early English features in the chevron and nail-head ornamentation carried around the acutely pointed head. With the exception of this doorway and the lower portion of the tower, which seems to be of Norman masonry, and, of course, the parapet of this feature, the entire edifice seems in keeping with the usual assumption that it was built c. 1270 by Bishop Walter de Merton, of Rochester. It is recorded that the steeple was struck by lightning and "burnt" during a violent storm in January, 1638, and possibly it was then reduced to its present mean proportions.

The interior of the church is still more attractive than the first impression from without. The three bays of the nave arcades are carried by slender and lofty columns. with beautiful foliage caps, having a stone core surrounded by Purbeck marble shafts, with an annulet midway up. These columns and moulded arcades are quite of the Lincoln Cathedral nave type, and that of All Saints, Stamford, in proportions and treatment, although necessarily on a much smaller scale; in the soffit of the eastern arch is a string of dog-tooth mouldings. The roof is a simple one of wood, designed by Street, and there are no traces of preparation for groining in the nave, except in the western bay, the foliated capitals and mouldings of which are in treatment some five-and-twenty years later. Westward of this bay, within either aisle, is a massive flying arch of masonry, and it looks as if the intention about 1310 was to carry out north and south transepts and a western extension of the nave, and to raise the tower, which would then have been the central feature of a grand cruciform church. For some unknown reason, probably owing to lack of funds, this ambitious scheme was never executed. The windows of the aisles consist of a pair of splayed equilateral lancets, with quatrefoil head, but the easternmost window on either side is the only pair really completed in accordance with the original design, and these are exquisite in proportion, having a detached shaft and inner traceried head, of the type of those in the triforium at Westminster, and the later ones in the eastern transept at Durham and the triforium at St. Ouen, Rouen. At the west end of the nave are 14th century insertions.

The chancel is surrounded on all three sides by an elaborate wall arcade, of moulded and cuspless trefoils, carried on bell-capped Purbeck shafts, containing in the spandrels wreaths of three-leaved foliage in high relief, and in one case on the north side, a

spirited dragon of slim proportions. Under the hood moulds, and between these and the arch moulds are four-leaved rosettes. Most of the students set themselves to measure and sketch this exquisite arcading, which forms the motif of much of Street's decorative work in the great hall of the Law Courts. Hanging on a column in the nave were lithographs by C. W. Wilkinson, executed about sixty years ago, showing the church within and without in an unrestored condition, and examination of these and of the elevations and details in William Cabeler's Specimens of Gothic Architecture, drawn by F. Mackenzie and engraved by H. Shaw (1839) aroused great and justifiable indignation at the extent to which restoration was carried by the eminent architect to whom it was entrusted a generation since. Comparison of these illustrations revealed the fact that the mechanical reproductions of the Chapter House windows at Westminster, with extremely hard and lifeless details in stone, respectively placed by Street in the east, north, and south walls of the chancel, replaced beautiful and florid examples of Late Perpendicular fenestration, that at the east end, now lost for ever, being an unusually picturesque and well-proportioned four-light feature. The high-pitched groined vault over the chancel is also modern, but rests on the Purbeck marble shafts originally provided to carry it, and appears to follow the lines of the fragments of vaulting shafts built up in the walls when the 17th century flat ceiling of plaster was constructed. The stalls with which the chancel was still furnished when Hasted wrote in 1788, had disappeared before 1839, so that their destruction cannot be laid to Street's charge; but the poor pulpit and rather substantial low deal benches in the nave date from his restoration, and it is difficult to understand why, with flint and rubble buttresses in evidence around him, he should have reared against the chancel walls outside, to carry the vaulting thrust, hardoutlined buttresses of staring red brickwork.

The Round Towers of Ireland.

Those who have read Mr. Anthony Scott's instructive paper on this subject, delivered some years ago before The Society of Architects, will be interested in Mr. Scanlan's article on "Ancient Monuments of Ireland" appearing in the *Irish Builder*.

After dealing with the geographical distribution of these monuments, Mr. Scanlan, refers to the pre-Christian and early Christian remains and the rise and dissolution of the monasteries in Ireland, and concludes by saying that there is no subject in the literary field or before the thoughtful, reading public, upon which there are so many contradictory views held, as on that of the round towers. Volumes have been written, and much time and learning spent, without any decisive result. It is generally considered as beyond the reach of conclusive investigation; failure caused by slight knowledge of archæology, and slight acquaintance with the architectural peculiarities of the towers and other ancient buildings.

Whilst giving every credit to Dr. Petrie for his researches and valuable work, and while fully agreeing with him as to the origin of the towers, and the times of their erection, Mr. Scanlan entirely disagrees with him as to the objects for which they were built, and the uses to which they were applied. Some of those uses which he gives can be shown to be practically impossible, and others most unlikely or improbable. Most of the views expressed by other writers on the subject are "inexpressibly puerile," as he has reason to know, after inspecting every tower in Ireland, except that on Tory Island.

That the round towers were of eastern origin there is now but little doubt, but that the Irish towers were erected for exactly the same purpose as their Eastern prototypes is not so generally agreed on. What this object and purpose was must ever remain a mystery. As Lady Wilde wrote:—"Though volumes have been written on the subject, it still remains inscrutable. Perhaps it is better so, for nothing is more revolting to the imagination than the satisfactory solution of a world-old mystery." There are many convincing reasons for believing that the Irish towers were erected as memorials to the founders or of some benefactors of the churches to which they were attached; some of these towers may have been sepulchral, others only commemorative. It is a significant fact that when Petrie was consulted as to the best form of memorial to O'Connell at Glasnevin, he immediately suggested a round tower, and the idea was at once adopted as being the most suitable and appropriate. It is not improbable that Petrie had altered the views he had advanced in his essay, as the result of mature consideration.

It is a matter of regret that the Board of Works have not published a complete list of the existing towers, with those that have been destroyed, as far as can be

ascertained. Such a list was prepared by the late Sir T. Deane, the first inspector of the national monuments, but it has never been given in the Board's annual reports. The number of towers that originally existed has been given as 120. The number of those still standing is about 60; of these over 40 are now vested in the Board of Works, situated in the different provinces as follows:—Leinster, 15; Ulster, 6; Connaught, 10; and Munster, 9.

The last report of the Royal Society of Antiquaries says: "It is regrettable to find that there is still a large majority of these monuments not vested for preservation. It had been hoped that the County Councils would take over the smaller objects, leaving the larger ecclesiastical ruins to be cared for by the State, but only in a few instances has this been done." It is better so, as the divided responsibility would be only injurious; besides, the County Councils have not the trained, skilful hands at their command, such as the Board of Works now possess. The Most Rev. Dr. Sheehan, at a meeting of the Society of Antiquaries at Clonmel, said that "he half regretted that a division of labour was created by the Local Government Act." The report alluded to above further states:—"The necessity had been dwelt on before of having properly classified lists of all the ancient monuments in each county in Ireland, as in England and Scotland; there was greater necessity for a similar inventory in Ireland, for the effectual preservation of our ancient ruins." In these papers every credit is given to the Board of Works for the manner in which they have discharged the trust committed to them, but it must be said that after thirtyfive years it ought to be time to be able to say that every object of interest was rendered as secure as circumstances allowed.

At the meeting of the Society of Antiquaries at Clonmel, above alluded to, the Most Rev. Dr. Sheehan further said "he thought it was high time to try to stir up something more of a public spirit in the land, particularly amongst our public bodies, and ask them to give some help in illustrating the antiquities within their respective spheres. He believed a great deal could be done in their schools, and he regretted that they had not adopted something of the system that prevailed with such remarkable success in Germany and elsewhere, where children were carried out of the schools at certain times, and carried through the surrounding country, and their attention directed there to the objects to which he referred. Thus the antiquarian taste was developed in them, and according as they grew up their power of observation was increased, and they were able to manifest the interest they felt in these objects of antiquity." It would be well if others in authority like the Bishop of Waterford took a practical interest in the subject. The Most Rev. Dr. Healy has done good work by his writings, especially in the publications of the Catholic Truth Society.

Mr. Scanlan alludes to the want of sympathy on the part of the Irish members of Parliament, and to their culpable neglect when large sums of money were voted for England, Scotland, and Wales, and Commissions appointed for these countries, while nothing of the kind was done for Ireland, where the field is wider and the need greater. The Gaelic League, too, could do much, but has done little to create interest in antiquarian pursuits; yet, what greater object lesson could be put before the youth of Ireland than those ivy-clad ruins that cover the face of the land, or "straddle moss covered beside their doors, where no school teaches from the most enticing book, the page of their country's history, lying before them."

The Business Side of Architecture.

At home, opinion is divided as to whether architecture is a business or a profession, and also as to what methods (if any) an architect may adopt to advertise himself.

In Canada there is no doubt on either question, if we may judge from a paragraph in a technical journal which states that an architect, whose name and address is given, has been holding an exhibition in his studios. The possibilities of various materials have been demonstrated and complete schemes shown for buildings of various classes. The architect referred to is, it is stated, making this an annual feature of his business.

Students' Correspondence Classes, 1911.

The examiners' report shows that the standard of work has not been maintained, and they recall the fact that the Council decided some time ago that the classes should be discontinued at the end of the term.

The following Students head the list in their respective classes and are entitled to prizes of the value stated:—

First year .. E. R. Frimston, Colwyn .. £1 1 0
Second ,, .. F. P. Taylor, Brentford .. 2 2 0
Third ,, .. D. H. H. Barry, Eastbourne .. 3 3 0

The two latter headed the list in the first and second years' course respectively last session.

Tall Buildings.

Our most unruly problem, the tall building, is, from my way of thinking, says Mr. Frank M. Andrews, of New York, the result of the logical working of the law of supply and demand. It is neither fantastic, avoidable, nor useless, will not yield to adverse legislation, because public necessity formulates a public opinion that will not legislate.

It is amusing to read in the publications of fifteen years ago the diatribes against it and prophecies of its early extinction which were provoked by the modest fifteen and twenty-storey structures of that time. The architect of the then tallest building in New York announced in print his belief that the end of tall buildings was in sight. Structures of twenty-five, thirty, forty, fifty, and even sixty storeys have been the answer. It furnishes a typical example of practical necessity and mode of existence creating a movement which ends in something distinctly characteristic of a people, and in this instance steel-construction and the tall building is affecting us as did the round arch and vault of the Romans. The business centres of such cities as New York and Chicago, as created to meet the conditions of 1860 to 1870, were soon outgrown, and the necessity for larger and better buildings became apparent. The established business centres could not be, or, at least, were not, moved, property values and the existing inter-relations in those centres being of too great moment at the time.

This generally prevalent condition produced different immediate results in different sections of the country, which long since have converged into an established common practice.

Skeleton Construction.

In Chicago, we find that the direct causes that led to the first example of true skeleton construction were—(a) the necessity for increased height; (b) which the character of the supporting soil rendered impossible on account of the weight of the then prevailing type of massive masonry walls and interior columns, and which could not be overcome unless (c) a system of construction be devised stronger and of less weight than other types, which was accomplished by the device designated by us as the "Skeleton Steel Construction."

The system as developed is a simple one in principle, consisting of supporting columns of steel or cast-iron, braced in all directions, and riveted or bolted to the horizontal girders and beams, which not only support the floor construction, but, more important still, also carry, storey by storey, the outer walls of the structure, which thus cease to have constructional value, becoming a thin screen of material that serves to enclose the building and to protect the steel fabric from exposure.

The outer walls being but screens, the masonry supporting nothing, their piers were in consequence easily reducible to a minimum surface width, and the area of glass could thus be largely increased, thereby giving a maximum lighting to the interior, a device rendered necessary by the generally increased height of our buildings fronting upon streets that could not be increased in width.

The walls, being non-supporting, could be reduced to a minimum thickness, thus providing an important addition to the interior area of each floor, and materially increasing the earning power of the building—an imperative necessity because of the rapid rise in ground value in central business districts.

None of this development would have been possible, however, if it had not been for the American type of elevator, which was promptly developed in response to this new demand, and has kept pace with it ever since by evolving new principles of construction and operation necessary to cope with the constantly increasing height of buildings and the enormous increase in service, both as to speed and volume of traffic.

This type has come to stay because of its attributes of structural endurance, safety, economy in first cost and of upkeep, and its general suitability to our modern conditions.

Architectural Treatment.

The development of the exterior treatment of the tall building architecturally has been exceedingly interesting. Briefly stated, our fundamental principle in design seems to have become established by treating the tall structure as a column with its base, shaft, and capital. In all of the best and most pleasing examples of the later work this element appears, and we find the lower storeys grouped in a single architectural composition supporting a long vertical and shaft-like series of storeys grouped into a simple treatment that carries the eye upward without interruption to the crowning feature of the entire design, which again is a series of storeys combined into the capitol, as it were, of the mass. The pleasing variety of thought in the handling of this scheme of treatment is one of the best features, and, generally speaking, is now characterized by a sober, refined self-control and a truly architectural spirit. In the classic feeling of the Italian Renaissance the municipal building of New York is unquestionably one of the best solutions of the problem on these lines that we have, while in the West Street building and in the Woolworth building, both in New York, we have equally good examples of the application of Gothic feeling and detail.

In pointing out the consummation of this century and a half of architectural growth in my country, I would have you enter the harbour of the city of New York on a transatlantic liner, and from that point of view for the first time observe the buildings of the lower end of Manhattan Island, with their towering and amazing

skyline and mountain-like mass of architectural grouping, picturesquely artistic and truthfully expressive of the spirit of our lives and activities.

I believe that it will grip the imagination of any observer, whether he sees it for the first or the hundredth time, and that he will experience from it that flow of thought and impression which is produced only in the presence of some great and inspiring thing. To me it illustrates the quality and the character of our people, their aspirations, and their peculiar genius in terms of architecture, as do our mountains and valleys, our lakes and rivers, the physical character of our land. Prosperity, wealth, and power we are surely possessed of, and we are as surely acquiring from the artistic wisdom and traditions of Europe that which is useful and good for us to have, and are applying it intelligently to our needs. As a people we are learning to respect and revere art, and to value its uplifting influence, and with these fundamentals to build upon, and with the artistic forces that are ever active amongst us, the future of American architecture will be worthy of high regard.

Some Objections to Skyscrapers.

Mr. H. C. Kent, F.R.I.B.A., in a paper read before the Institute of Architects of New South Wales, expresses the hope that the City of Sydney may not develop into the excesses of Manhattan in respect of sky-scrapers.

While one may possibly have no objection to an occasional tower, yet if we are to have unchecked license in this respect, we shall have to contemplate the probability of streets of towers, with the disadvantages incidental thereto.

The lower or southern end of Manhattan is now the site of the largest number of tall buildings that the world has yet seen.

So greatly have these increased during the last four years that not long ago the President of the New York Fire Underwriters prophesied that in the event of a fire ever starting in the top storey of such a group of sky-scrapers, which firemen could not reach effectively, the loss of property might run into hundreds of millions of pounds (not dollars), and he recommended legislation limiting the height of buildings to 125 feet.

Notwithstanding his warning, however, the progress skywards has gone on increasing, until the recently erected Singer building in Lower Broadway, the highest occupied building in the world, has been carried to a height of 47 storeys, or 612 feet.* (The Eiffel Tower is 984 feet.)

^{*}It is stated, on the authority of the *Concrete Age*, that plans have been filed for the construction at Broadway and Park Place, New York City, of the highest building in the world. From the curb to the apex of the tower it will stand 750 feet and contain 55 stories. The Metropolitan tower is 700 feet 3 inches, and the Singer tower 612 feet. Ed.

Mr. Kent thus summarizes the reasons for his objections to sky-scrapers.

He objects to them on humanitarian grounds, for streets of sky-scrapers must mean that the occupants of the lower stories of such buildings must be working by artificial light, and though it may be necessary for a certain proportion of humanity to work all their daylight hours by artificial light in mines and the dark places of the earth, he cannot believe that it is desirable for us to so multiply that number by adding to it the great multitude who must work in the lower stories of our city buildings.

He objects to them from the increased constructive and fire risks incidental thereto.

Of course, the more recent concrete casing of our steel construction has almost indefinitely prolonged the life of such constructions, but in many existing sky-scrapers not so protected one trembles to think what the catastrophe will be like when the limit of life of any portion of such steel work is reached.

As to fire risk, the opinion expressed a few years ago by the President of the New York Fire Underwriters has already been quoted.

He objects to them on æsthetic grounds, for while an occasional tower may serve as a feature and add dignity and beauty to a building, he cannot conceive of beauty of proportion in a continuous street of towers, or of buildings, say twenty or twenty-five storeys in height, unless we are to learn to alter all our preconceived ideas of proportion.

Neither undue inflation of city values, nor land taxation should so influence our city as to cause us to take New York as our model, rather than London, Paris, Vienna, or Berlin.

Mr. Kent suggests as a limit of height for street frontages, that in any given street the limit of height of a building should be one and a half times the width of the street it faces (he is not speaking of the backs of the buildings to lanes or alleys), so that in a street of 66 feet width the limit of height should be 99 or, say 100 feet, and in a street, of 90 feet width, a limit of height of 135 feet, and in a street of 100 feet, a limit of height of 150 feet; if any greater height were required it should only be permitted by setting back such additional storey two-thirds of its height, that is, say, 8 feet to each 12 feet, thus preserving the same angle of sunlight.

The Modern Garage.

An important labour-saving device in the modern garage, says Construction, is the turn-table. Where the floor space is limited, and where there is no chance to back or turn around, this device is practically a necessity. It is also very useful when the machine is being washed or repaired, as any part desired can be turned towards the light. A common form of turn-table consists of a circular platform slightly dished towards the centre and braced on the under side by heavy ribs. It is supported at the centre by heavy ball-bearing and near the edge by a circular ridge on the lower side of the platform. This ridge rests on several small wheels placed with their axles in standards resting on the bottom of the pit. These wheels prevent the platform from tipping when the cars run on to the turn-table and also act as roller bearings when the platform is turning. A less expensive type of turntable is one built without a pit. In this case the platform comprising it is placed directly on the floor and does not require any bolts or screws. This type of table is compact and complete in itself, and will not tilt and it can be installed at a very little expense as the only thing needed when installed in the finished garage is the concrete approaches, which can be made at a small cost. If the space in the garage is so limited that it is necessary to turn the steering gear three or four times whenever the car is backed out, the price of one of these tables would be saved in the wear and tear on the tires and the steering gear that otherwise would result.

Where a turn-table is omitted, it will be found advantageous to adopt a sloping concrete floor. This type of floor, which is becoming decidedly popular in many small garages, is so graded that a slight push will dislodge the car and send it out of the door. In case of fire this would prove to be a big advantage to the owner, for fires generally break out so quickly that there is no time to crank up, and cars must be gotten out without loss of time. The car is kept from sliding while it rests either by setting the brakes or by placing a small wooden wedge under the wheels. In the modern garage, the lack of space generally requires an arrangement that will permit of all the space being utilized and not wasted. It is wise for anyone contemplating building to be sure that he has enough space for future enlargement. Very often more space is desired, and unless provision is made for extension in the original plan it cannot be obtained without considerable expense. The matter of equipment is also something that must be thoroughly considered. One of the most important features to demand attention in this respect is a storage tank for gasoline. This in the interests of safety should be buried outside of the building and the gasoline pumped through a connecting feed pipe into the automobile as required. In this manner a large quantity can always be kept on hand without unduly endangering the property. It is also necessary to have convenient facilities for cleaning

the car. A commendable device which is being adopted quite extensively is a swivel washing apparatus. This swivel hangs from the ceiling and the hose is fastened to it so that one can walk around the car and reach all points with ease. Both in the construction and equipment of buildings of this type economy is found in selecting such materials and features as are the best and most approved, and automobile owners are awakening to the fact that unless the garage is fireproof the investment at the best is an uncertain one.

The Clayworker and the Architect.

The *British Clayworker* in pointing out the importance to the clayworker in getting the architect to visit the brickworks and examine the stock, emphasizes the necessity of making a good impression at the start by seeing that the premises are clean and tidy, a matter which also makes for more efficient working.

Not a few clayworkers, says the writer, fail to realize the attitude of mind of the architect to the materials he employs. They know what constitutes a good brick and, to the best of their ability, they endeavour to supply bricks which correspond to a maker's ideas of quality. Architects, on the contrary, do not view the matter in at all the same light. They are not concerned with the impurities or other difficulties of manufacture; it does not matter to them that the clayworker has really made the very best he could out of a difficult material; the architect's business is to obtain a brick of a suitable kind, and he specifies accordingly.

An architect may, therefore, be most pleased with bricks which are, from the technical standpoint, very inferior; they may be irregular in colour, or abnormal in size, or blotched or cracked in various ways, yet to the architect they may prove to be just what is required for some buildings in which he is at the moment interested, as his likes and dislikes are far more affected by the appearance of the bricks in an æsthetic sense than from their value as strong blocks with a monotonous colour.

The yard which is most accessible to an architect, the clayworkers who extend the heartiest welcome to him when he calls informally on them, will often find that their most despised products are turned to better account than their much vaunted "best pressed facings," for in architecture, as in all other professions, men are continually on the look-out for "something different" in the way of material, and happy is that yard where a successful architect is in the habit of spending several hours a month, studying the goods produced with a view to using them in his work.

If the yard is dirty or unattractive, or if he is repelled by the treatment he receives, an architect's visits will be rare occurrences, but where clayworker and architect work together there is no doubt as to the advantages to be derived by the former from such a friendship.

Town Development in England.

Legal Control and Local Expenditure.

Mr. H. Chaloner Dowdall, M.A., of the Northern Circuit, Barrister-at-Law, in a paper contributed to the Town Planning Conference, points out that the State may control action within its territory by common-law, local government method, or direct State control.

Each of these methods, either singly or in combination, operates in the sphere of land development in which town planning occupies an increasingly important position.

The earliest system of land development with which we are concerned is that which was introduced and matured by feudalism, namely, the common-law system, which governed all land development in England until the middle of the eighteenth century, and which still remains in force, subject only to those statutory limitations which have been introduced since that time.

It is impossible to deny that much of the land of this country, both urban and rural, has been and is being admirably developed under this system. A country gentleman of the eighteenth century often bestowed as much interest and intelligence in the development of his estate as a great manufacturer does on his factory to-day and the squares, terraces, and semi-public parks of London and the provincial towns are in many cases achievements which command admiration. More recent developments of unfettered enterprise are of even greater interest: model factories, model villages, garden cities, and the like are rising up in every part of the country, affording in many instances both the ideals for town development and also encouraging illustrations of the fact that an enlightened proprietor may combine conditions of public beneficence with satisfactory financial returns.

It was in the eighteenth century, and more particularly under the stress of growing manufacturing industry, that the common-law system was felt to be inadequate.

The Parliament of that time thoroughly understood trusts and private Bills, and the remedy was sought through those means. A vast number of Improvement Acts, and Turnpike Acts and Canal Acts were passed whereby a corresponding number of bodies of commissioners or trustees were authorized in each instance to execute the trusts specially reposed in them. A great number of the clauses inserted in these innumerable private Acts of Parliament were naturally inserted in each, and, having assumed a common form, were ultimately embodied in public statutory form so that they might collectively be incorporated in any private Act subsequently passed. Acts of this kind specially bearing on the present subject are the Lands Clauses Consolidation Act of 1845, and the Towns Improvement Clauses Act of 1847.

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Public improvements are still often effected under powers conferred by the local Acts which every year pass through Parliament, but by the time that the Towns Improvement Clauses Act was passed in 1847 one may say that the great period of special Improvement Acts promoted for each particular locality was drawing to a close; for the Reform Act of 1832 had been followed by the Poor Law Act of 1834, and the Municipal Corporations Act of 1835, and the principle of carrying on local government by some uniform scheme of popularly elected representative bodies was now admitted.

In 1848 was passed the first Public Health Act, and under the general powers which it conferred it was possible for different localities to establish Local Boards of Health, popularly elected on a uniform system.

By the Public Health Act of 1872 every municipal borough, local board district, and Improvement Act area was constituted an Urban Sanitary District, and similar powers were conferred on Town Councils, Local Boards, and Improvement Commissioners. These powers were more clearly defined and consolidated by the Public Health Act of 1875, and extended in regard to matters with which we are here concerned by Acts of 1888 and 1907. By the Local Government Act of 1894 a uniform type of more popularly elected Urban District Council was substituted for the Local Boards of Health and Improvement Commissioners, which were thereby abolished, the Town Councils remaining as the Urban Sanitary Authority for the Boroughs.

Leaving on one side all that concerns the construction and repair of roads, sewers, and buildings from the sanitary point of view, and touching only on that which concerns the planning and replanning of towns, one may say that, apart from the Town Planning Act and apart from Special Local Acts, the powers of a Borough or Urban District Council are shortly as follows:—1. The Council may, with the approval of the Local Government Board, make bye-laws regulating the level, width, and construction of new streets, and, with reference to the sufficiency of the space about buildings, to secure a free circulation of air (P. H. Act, 1875, s. 157). 2. The Council may buy land in order to widen, open, or enlarge streets, or, with the sanction of the Local Government Board, in order to make new streets; provided that where compulsory powers of purchase are sought they must be obtained by Provisional Order and are subject to the Lands Clauses Act (P. H. Act, 1875, ss. 154, 175, and 176). 3. The Council may prescribe a line beyond which no new or reconstructed building may be erected or re-erected, compensation being paid to the landowner for the loss he sustains (P. H. Act, 1875, s. 155). 4. The Council may to some extent control the frontage of buildings (P. H. (Buildings in Streets) Act, 1888). 5. The Council may vary the intended position, direction, termination, or level of any projected new street in order to secure direct, easy, and convenient communication (P. H. Act, 1907).

It must not, however, be forgotten that although, apart from the Town Planning Act, these are the principal powers of a Council in controlling the action of others, yet the Council, or one or other of its allied public bodies, has enormous facilities for increasing the health, appearance, and amenity of a district by the power it possesses of itself constructing parks, museums, libraries, schools, institutes, baths, markets, and other public buildings, and in carrying out housing schemes for the working classes.

Having very briefly sketched the growth of local governing bodies and the powers they possessed previous to 1909 with reference to town planning and replanning, a word must be said as to the nature of the Town Planning Act of that year. It will be remembered that for the century previous to 1848 control had been exercised by Private Acts of Parliament, and that since that date control has chiefly been exercised by local governing bodies, subject, however, in many instances, to the approval of the Local Government Board, and subject also to the sanction of Parliament when compulsory powers of purchase are required.

The Town Planning Act relates to land in course of development or likely to be used for building, and in certain cases to land adjacent thereto, whether already built upon or vacant, and it introduces a new and ingenious method of procedure; the effect of a "scheme" approved under the Act is that of a Private Act of Parliament, but the "procedure regulations," which take the place of standing orders in Private Bill or Provisional Order procedure, are specially adapted to the requirements of the case; the central criticism and control, instead of being exercised by a committee of either House or by Parliament itself, will be exercised by an expert department of the Local Government Board, Parliament only reserving to itself a right of veto in certain circumstances. The local authority also, which for this purpose may be either a Rural or Urban or Borough Council, or a combination of them, appears, either spontaneously or possibly under compulsion, as promoter of the scheme and as responsible for its execution. As to the matters which may be included in a scheme, the Act contains no limitations, though presumably they will relate to those set out in general terms in the fourth schedule of the Act. The "general provisions" will presumably take the place of common form clauses in private Acts, and it is clear that, not only on account of the substance of the matters with which it deals, but also on account of the constitutional precedent which it has made, the operation of the Act will be followed with keen interest on all hands. The Act, in short, gives to the Local Government Board a perfectly general power to make local Acts of Parliament, called "schemes," with reference to streets, roads, and other ways, including stopping-up or diversion of highways; buildings, structures, and erections; sewerage; lighting; water supply; ancillary works; extinction and variation of private easements; and all incidental powers. The only limitations

on this legislative power vested in the Local Government Board are, first, that if anyone interested gives notice of objection to any scheme, or if the scheme suspends any enactment of a public general statute, then either House of Parliament may within a limited time exercise a veto; and, secondly, any person injuriously affected must be compensated, such compensation, however, being assessed by a Local Government Board arbitrator. This power of interference with private rights by a Government Department is in England and within modern times quite unprecedented in magnitude, and the situation is one fraught with immense possibilities.

This short account of the nature of the Town Planning Act would be incomplete without some reference to the Development Act of the same year. It has already been pointed out that public control may be exercised not only by common law and not only by local government, but also by the Central Government either passing special Acts of local application or itself executing or controlling works. The Development Act illustrates this last method.

Leaving on one side those provisions which deal with the construction or subsidy of light railways, harbours, inland navigation, afforestation, drainage, and so forth, the road-improvement clauses establish under the Treasury a Road Board, with power to construct and maintain new roads or to subsidise the construction or improvement of roads, principally in rural districts, to which the powers of Urban District and Borough Councils do not apply.

The common law of highways has already been alluded to; the Highway Act of 1835 gave Highway Authorities, now County Councils, power to enlarge existing roads and to construct new roads, but in order to construct new roads no power was given to acquire land compulsorily. The Development Act gives the Road Board power to compulsorily acquire land for the construction of new roads, and also to acquire land some 220 yards on either side of the new roads, the arbitrator for compensation in such cases being appointed by the Lord Chief Justice and the general control kept in the hands of the Treasury. This Act, therefore, also illustrates the bureaucratic period of government upon which we are now entering, though it will be noticed that in this case authority in a kindred matter is entrusted to a different department, the Local Government Board controlling local legislation and the Treasury controlling the local execution of national works of domestic utility.

The expense of carrying out a Town Planning Scheme.

It appears that the cost will fall under three heads:-

1. Cost of preparing and promoting a scheme.—Nothing is said as to this beyond the provision of Section 65 (2), that expenses will be charged on the general district rate. Perusal of the Procedure Regulations does not suggest that the cost of promotion need be very heavy.

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2. Cost of compensation to properly owners for injurious affection (Sections 58 and 59).—This compensation, failing agreement, is to be assessed by a single Local Government Board arbitrator, and is quite general. Suppose, for instance, that the scheme provides for a carriage-way twice the ordinary bye-law width: this would not only deprive the landowner of part of his land, but would also throw on him a double burden of street works, and might also leave him with a piece of land of quite unmarketable proportions. The Local Government Board, in their circular of May 3rd, 1910, suggest that the amount of compensation payable may generally be reckoned as the difference between the value of the property unrestricted by the scheme and the value of the property burdened by the conditions which the scheme imposes. The amount of compensation is, however, greatly limited by Section 59, which provides that provisions in a scheme prescribing the space about buildings. limiting the number of buildings, or prescribing their height or character, shall not give rise to compensation if such provisions are, in the opinion of the Local Government Board, reasonable to secure the amenity of the land included in the scheme or any part thereof. Thus such conditions as are often imposed by restrictive covenants may, if reasonably necessary for the amenity of the area, be imposed by the scheme free of charge. It will be noticed that the standard of amenity is to be judged with reference to the area comprised in the scheme or any part thereof, and it may be important for local authorities, in determining on an area for a scheme, to bear this consideration in mind.

No compensation is payable for any provision of a scheme which might have been enforced by bye-law; thus, in Liverpool, where 80 feet may be required for a main thoroughfare, no compensation would be payable for such a requirement.

Against the cost of compensation must be set off one-half the increase in the value of any property which is affected by the scheme, and this, apparently, whether that property is or is not included in the scheme.

Cases may occur where a well-considered scheme may be of great public benefit and entail no expense for compensation at all.

3. Cost of land purchased by the local authority for the purpose of a scheme (Section 60).—It may be that the scheme includes the laying-out of parks or open spaces; or in certain cases, as, for instance, when a wide boulevard is contemplated, or one cutting awkwardly into building land, or in many other cases, it might be more convenient for the local authority to buy than to compensate; or again, the local authority might prefer to purchase an entire large site for development by builders in accordance with its requirements, thus keeping the whole control in its own hands; in any such cases Section 60 provides easily for purchase of the land, the statute referred to in that section providing that compulsory powers of purchase may be exercised by order of the Local Government Board without statutory confirmation,

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unless an impartial public inquiry shows that the land is unsuitable for the required purpose, or that it cannot be acquired without undue detriment. The price to be paid for the land is to be assessed by a single Local Government Board arbitrator, no additional allowance being made for the purchase being compulsory. It may be doubtful whether land required by the local authority for schools, libraries, or other public buildings within the area would be land required "for the purpose of the scheme."

It is clear that a scheme does not necessarily involve the local authority in the purchase of land

The new Church of England Infants' School, which has been built on a site at the back of the present girls' school in Church Street, Wantage, is built of brick and tile, and contains a large central hall, 41ft. by 18ft., three classrooms each 23ft. by 21ft., cloakrooms, and a teachers' room upstairs. The School is heated by hot water and lighted by gas. Between the two schools is a wide stretch of land suitable for a playground, etc. Mr. Douglas, of Newcastle, was the architect. The contract price was £1,660.

Public interest is being revived in the proposal for creating new markets in South Melbourne behind the military barracks, and a provisional board is being formed for a company to carry out the scheme. The plan has been prepared by Messrs. Coles & Joseland, architects. The markets, which are to cover an area of sixteen acres, will provide for cool storage, club house, with bedrooms and dining rooms, and stabling for 2,000 horses. The scheme involves a lease of Government land and a proposed line of railway, and has been referred by the Cabinet to a sub-committee, consisting of the Acting Premier, the Minister of Lands and the Minister of Railways.

The Church of St. Leonard's, Bedford, is to be executed in Crowborough blue bricks, with Weldon stone and red-brick dressings, and local tile roofs. The interior of bricks plastered, nave arcades of Weldon stone, floors of wood block, leaded-light windows. The church is to be heated by radiators, and lit by electric light. The plan shows a tower at the west end, nave, aisles, south chancel aisle, chancel, organ chamber, and vestries. The completed church to hold over 800 sittings, and to cost £7,000. It is proposed to build half the nave, aisles, chancel, etc., for £3,800, and to accommodate 500 sittings. Mr. George P. Allen, of Arundel Street, Strand, London, is the architect.

The Influence of Art on Daily Life.

Dealing with this subject in an article in *The Architect*, Mr. P. Walton Harrison says, architecture is the parent art whence all the auxiliary arts spring. The reason of this is obvious, not only because a structure must be raised before it can be decorated, but also because the conditions of man and the surroundings of nature which mould the architecture act with equivalent forces on all subsidiary creations. Hence sculpture and painting, born as twin brothers, acknowledge architecture as a parent entitled to govern and to guide.

Kindred, if not identical, principles of construction, composition, and ornament prescribe the style of a building, of a statue and wall decoration; like laws regulate the form of a stone facade, of a wood cabinet, of a wall-painting, and a woollen carpet. I do not wish to under-rate the difficulty an unprofessional person may find in mastering these principles with their practical applications. But it may be well to recognize that without some knowledge a householder's judgment must be almost worthless; that wanting the first rudiments he will fall a victim to blind caprice and unreasoning fashion. Such misadventures, which have brought upon the arts in all their aspects incalculable evils, may, I think, in great part be averted even by the most elementary tuition. Art education, fortunately, becomes day by day more widely extended; and casting aside what is false and meaningless, people are taught to revert to a simplicity akin to nature and appreciable to clear reason and common-sense. Nor is it hard to gain a sound groundwork by aid of the plain and practical books which treat of the orders of architecture and the principles of design and decoration; and such teachings may receive pleasant illustration by visits to public museums and schools wherein national styles and chronological developments are exemplified by leading historic examples.

What is the style, Italian, Gothic, or otherwise, which an Englishman may best select for his dwelling? In the majority of cases this is decided for him, and not by him. In a city, at all events, the chances are that he will have to content himself with "the common square house" which he must make the best of. But, of course, the ideal condition is that a man possessed of some modest independence shall begin at the beginning, and first construct the house which he will afterwards proceed to decorate and furnish. Thus in due course the inside grows in harmony with the outside, all is of one type and pattern, and will turn out a consistent and complete work of art. This I have known done successfully—of course under professional advice, for I need scarcely say that the man who acts as his own architect has a fool for his client. Happily it is not difficult in the present day to find a well-trained and trustworthy adviser. Now, as in the best epochs, the divisions are broken

down between high and low, great and small; the artist is not above industries. while the artisan is raised by legitimate aspirations. Art, as Thomas Carlyle says of poetry, "is the attempt which man makes to render his life harmonious." Very welcome is the close fellowship that has sprung up among skilled labourers. We may possess no "Gardens of the Medici," but we have at least the Schools of South Kensington. And throughout the country in the same Government institutions are seen studying together, the architect, the sculptor, the painter, and the art workman. And it is no slight gain that among the pupils may be counted the sons of capitalists and of private gentlemen. Nothing, it is well known, tended more in the immediate past to the degradation of the arts than the ignorance and false taste of the middle and the higher classes; but now when art culture, at least in its rudiments, is possessed by all conditions in life, professional men may, with advantage, take counsel with patrons and connoisseurs. Such relations between employers and employed have in the best times led to salutary results. The hope would not seem unreasonable that the architect and decorator may be incited to rarer beauty and subtler utility by the well-to-do, well-read, and widely-travelled Englishman, who not unreasonably requires that his house in its plan and appointments shall minister to his highlywrought sensibilities. It is through such reciprocities that the domestic arts have ever blended with the habit and complexion of the times, and it is yet possible that new and improved adaptations may follow, when the artist shall find equivalent expression for the better thought of man and the higher phases of life.

Never were the facilities greater for bringing domestic surroundings into keeping with the mind's imaginings. The sage advice has indeed been given to "leave the goodly fabrics of houses meant for beauty only to the enchanted palaces of the poets who build them with small cost." But fortunately "the thing of beauty" is not costly in proportion to the joy it brings, and while the necessaries of life have grown year by year dearer, elegancies, and even luxuries, have come within the reach of moderate means. It may be observed that there are typical characters which appear to fit typical houses; on the other hand, incongruities sometimes arise between tenants and tenements. It may readily be conjectured that there exist certain angular, serrated individuals to whom gable ends, barge-boards, and corkscrew chimneys prove most congenial; while there are others of symmetric proportion, balanced thought, and finished manner, who might feel most at home with a geometric and ideal villa as designed by Palladio and Sansovino. What is greatly to be desired is, that art shall express character of some sort, for in these days, especially in city life, the bane has been that houses, like their inhabitants, are characterless. Artists, however, of late years, both at home and abroad, have set a good example; they have raised habitations which are as picturesque as their own manners are unconventional. Studios are naturally built and adorned in response to the arts they shelter—quiet retreats secluded from the busy world in

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gardens among shadowy trees, or shut off from noisy city life by tapestries, and otherwise far removed from senseless fashion by old treasures, painted glass, cabinets, carvings, costumes, and embroiderings which transport the fancy to periods historic and picturesque. A studio fitly reflects the style of an artist's composition; a library, in like manner, echoes an author's thoughts, and each will generally be found to yield material for a picture. Indeed, scarcely any better test can be made of the skilfulness, or otherwise, of any structure or decoration than by asking the simple question, "Will it compose well; will it add beauty to the landscape; will the whole arrangement make a pleasing picture?" Many such paintings live within the memory. Take as example Lord Lytton and Charles Dickens, each seated among books in his library; or again, the studios of great artists surrounded by the works their genius has called into being.

Each man, though but a small unit in a large world, impresses his mind indelibly on his home, and something more than idle curiosity leads a traveller to search out the haunts and habitations of Coleridge, Wordsworth, and Shakespeare. Matter impressed by mind becomes art.

The reverence for antiquity, the love for what is old, has made our century a period of revivals. And there is a reason under the law of reaction why men suffering from the pressure, the turmoil, the perpetual motion of modern civilisation, should seek refuge in the tranquil and poetic past. Young men rush to the city, while older men have retired to the country, only too happy if amid the beauties of nature could be found repose in

.... "an English home—where twilight pour'd On dewy pastures, dewy trees, Softer than sleep—all things in order stored A haunt of ancient peace."

The country seats of old England gave place to Palladian villas, not of native growth, but exotics transplanted from abroad. Then ended for a time, at any rate, the national type, and houses were raised for pride and ostentation. The successive architectural styles, often named from the reigning sovereign, which took root in British soil, were, it must be confessed, far from legitimate in descent; the Elizabethan was followed by the Jacobean, and in due course came Queen Anne and the Georgian. Nothing can be more melancholy than the degradation and corruption into which the arts had fallen, when at last the notion happily seems to have occurred that it might be well to revive the old styles in their purity. Hence the resuscitation of the Gothic, not only for ecclesiastical but for secular uses; a revival which, notwithstanding some extravagances and follies, brings to our English homes manifold forms of fantasy and beauty. Since have followed other phases, and one of the latest and most favoured of ideas is that the Queen Anne style, though somewhat mongrel, bids best for the art of the future. These several revivals have the advantage

of being sustained by research. And so critical has been the study of historic master-pieces that the care-taking revivals of Classic, Gothic, or Renaissance types reproduce the style purged from late corruptions, in the chastity of the best period. Thus there is good ground to hope that shams have had their day; indeed, there cannot be a doubt but that the domestic arts have gained greatly in purity, simplicity and truth The time has now come when art permeates all conditions of society, ministering to the luxuries of the rich as well as to the necessities of the poor. The aim should be in all our works to approach the completeness and fitness which mark the more perfect ways of creation, making our homes, the furniture of our houses, the clothes of our bodies part of that large economy in which uses intermingle with beauties.

Art and Utility in Town Planning.

Mr. Arthur Race, Borough Engineer, Barrow-in-Furness, is of opinion that excellent as the 1909 Act is, it is in many respects inferior to the legal powers granted to towns in Germany.

How many blemishes in the way of unsuitable buildings will be made in beautiful health resorts, and how many buildings will be erected on land which will, in a comparatively short time, be required for highway purposes before some further legislation is passed to prevent it.

Much abstract matter has been written on the subject of town planning by members of other professions, particularly architects; and municipal engineers feel thankful to them for the artistic ideas which they have given to them, but the practical side of the matter will always be the ruling one, and the engineer has to consider the subject primarily from this aspect. It is difficult for the question of town planning to be standardized in the manner in which the general engineering works are now-adays being dealt with. The municipal engineer has, therefore, up to the present time contented himself with the planning of actual schemes that have been laid before him, and he has not had the opportunity, nor has he considered it advisable, to prepare fanciful schemes, which, although perhaps very desirable, are far from being practicable under the present conditions.

Whilst almost every one will agree that it is most desirable that more regard be paid to the architectural and æsthetical, it is hoped that this improvement will not be at the expense of comfort and durability. The obvious natural order in designing a building should be, firstly, its stability; secondly, its suitability for the purpose for which it is intended to be used; and, thirdly, that it should be clothed in proper architectural form. It seems to the author that there is a tendency to invert the order of these desiderata.

An Arts Building for New South Wales. Support by the Government.

Architects, artists in painting, in sculpture, and in arts of kindred nature, and also those of the public who delight in things beautiful, will, says *Art and Architecture*, welcome the news that at last a Government is in office, which has some knowledge of the value of art to a community, and which recognizes that the time has arrived when something of a tangible nature should be done to encourage and assist those who follow the difficult profession of art.

In the past, art in the broad sense of the word has not been encouraged by either Government or people, but here at last appears a Government which is awake to its opportunities, and its responsibilities in this matter. It therefore behoves all artists and workers in the crafts to support the Minister for Education, in his effort to find a home for the arts, for there can be no doubt that until the various societies and institutes are properly housed, they cannot be expected to work with zeal or with profit to themselves or to the public. The question of supporting and encouraging art workers concerns the public very directly, for art is the medium through which the best in a nation is pourtrayed, and its history recorded in stone and on canvas. If then our nation is to take its place in the future as one of the great nations of the world, as all good Australians hope, the time is ripe for action in strengthening those arts which make for the development of the finer side of life.

The proposition of the Minister is that a building be provided, in which all the chief arts will find a home, and wherein exhibitions would be held from time to time; while part of the building may be used as the nucleus of a conservatorium of music. This will be a good start, and the building might be called "The Arts Building." It would then be known to the public as the place where all the information concerning matters artistic might be obtained, and would be the rendezvous of all artists, who would in this way be brought more closely into touch one with another—the architect with the painter and the sculptor, the musician with the painter and the architect, and all of them with workers in the kindred arts and crafts. The benefit to artists, the enlargement of their outlook by association with their fellows, would be immense, and the gain to art generally, and therefore to the public, would be greater than most people are aware of.

These suggestive points are set down as being worthy of consideration, when the scheme is set on foot, and we feel sure that Mr. Beeby, who has evidently a knowledge of the capabilities and possibilities of art and art influence in this country, will bear them in mind.

We congratulate the Minister for Education in his endeavour to assist the arts, and believe if his efforts are supported by the unanimous action of artists and those who have the artistic instinct, that the outcome will be greatly in favour of the general advancement of art in this country.

Address to Their Majesties the King and Queen.

The following is the text of the Society's Address and of their Majesties' reply: "TO THEIR MOST GRACIOUS MAJESTIES KING GEORGE V. AND QUEEN MARY.

"May it please Your Majesties-

"We the President, Council and Members of The Society of Architects, humbly tender the sincere expression of our loyal and dutiful attachment to the Person and Government of His Most Excellent Majesty the King and of our respectful and affectionate regard for Her Most Gracious Majesty the Queen.

"We respectfully beg to offer for your Majesties' gracious acceptance our most sincere and hearty congratulations on the happy event of His Majesty's Coronation as King of these Realms and Her Majesty's Coronation as the Queen Consort, and we most earnestly pray that your Majesties may be blessed with a long and prosperous reign."

In Testimony whereof we have hereunto caused our Common Seal to be affixed.

GEO. E. BOND. President.

F. S. LESLIE, Lieut.-Col. R.E., and Brevet-Col. (ret. list), *Hon. Secretary*.

C. McARTHUR BUTLER, Secretary.



HOME OFFICE.

WHITEHALL,

18th July, 1911.

"SIR,—I am commanded by the King to convey to you hereby His Majesty's thanks for the Loyal and Dutiful Address of the President, Council and Members of The Society of Architects, on the occasion of Their Majesties' Coronation."

I am, Sir,

Your obedient Servant.

WINSTON S. CHURCHILL,

The Secretary,
The Society of Architects,
28, Bedford Square, W.C.

Mainly about Members.

A Town Hall is being erected at Beaconsfield from designs by Mr. Percy Hopkins, of London.

A new bank at Ballyconnell has been erected from the designs of Messrs. Blackwood & Jury, architects, of Belfast.

A new Church has been erected at Blaenycwm from the designs of Mr. R. S. Griffiths, architect, of Tonypandy, who is also a Town Councillor. The cost of erection was £1,000.

Mr. P. G. FRY, Weston-super-Mare, is the architect for the Church of St. Paul, about to be erected at a cost of £10,700 in the Parish of Emmanuel, Weston-super-Mare,

Messrs. Hukins & MAYELL, architects and surveyors, have removed their offices from Bank Chambers, 76a, Westbourne Grove, to 124, Westbourne Grove, after being over 30 years at the first-named address.

Messrs. Hunter & Woodhouse, of Belper and Derby, have been awarded the second prize in the competition for Houses for Small Holdings, held in connection with the Royal Agricultural Society's Show at Norwich.

The new School for infants at Gateshead which is an addition to the existing school buildings, was recently opened, and has been erected from plans prepared by Mr. F. W. Purser, architect and surveyor, of Gateshead. The cost of erection was £5,650.

Amongst those attending the Town Planning Tour in Northern Europe, arranged by the National Housing and Town Planning Council, are: Mr. E. C. P. Monson, F.R.I.B.A., architect to the Sutton Trust, and Councillor A. L. T. Tilley, Chairman of the Housing and Town Planning Committee of the Dorchester Town Council.

The new engines for the Wexford Embankment Commissioners, who are the authorities for the reclamation area of the North and South Sloblands at Wexford, are to be of the Diesel oil engine type and installed by the Diesel Engine Company, London, under the supervision of Mr. Arthur E. Porte, M.I.C.E.I. The engine house is from the designs of Mr. R. M. Butler, F.R.I.B.A., Dublin.

A magnificent silver dessert service, weighing upwards of 420 ounces, and a pearl necklace and diamond pendant were recently presented to R. W. Brother F. S. W. Cornwallis, Provincial Grand Master of Kent, and Mrs. Cornwallis, by the Freemasons of Kent. The duty of making the presentation devolved upon W. Bro. G. E. Bond, one of the founders of The Society of Architects Lodge, who in an eloquent speech emphasized the great services rendered by the recipient.

Meetings and Fixtures.

- Sept. 7th. Committee and Council Meetings. House List, etc.
 - ,, 14th. Entries for Examination close.
- Oct. 1st. Travelling Studentship Tour results to be submitted.
 - .. Last day for receiving nominations for Officers and Council.
 - ,, 3rd, 4th, and 5th. Examinations for Membership, London, Manchester, Cardiff, etc.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumre.

Annual General Meeting.

The Twenty-seventh Annual General Meeting of The Society of Architects will be held at 28, Bedford Square, London, W.C., on Thursday, October 19th, 1911, at 8 p.m.

Agenda :-

- 1. The President to take the chair.
- 2. Minutes of the last Annual General Meeting, and of the Special General Meeting held on May 11th.
- 3. Nominations and Announcements.
- 4. Ballot for candidates for Membership.
- 5. Council's Annual Report.
- 6. Election of Officers and Council, 1911-12.
- 7. Votes of thanks.

Light refreshments will be served after the meeting.

THE

Journal

OF

The Society of Architects

FOUNDED 1884. INCORPORATED 1893

Including Transactions and Architectural Notes.

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SEPTEMBER, 1911.

New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

A. A. School of Architecture.

We have pleasure in calling attention to the Curriculum of the Architectural Association School of Architecture, now acknowledged to be the most important and successful School of Architecture in the Country.

The School is controlled entirely by members of the architectural profession, and its teaching staff is chosen from practising architects, so that its scheme of education is eminently practical and calculated to prepare a student in the most useful way for his professional career.

The Association has now secured the services of Professor Beresford Pite as Director of Education, and during the ensuing session he will take control of the Evening School, giving special instruction in design, and will deliver a complete course of lectures on Architectural History, which, with the constructional lectures, will be so systematized as to work in direct co-relation with the design studies in the Studios, although at the same time it will be possible for detached students to attend these lectures.

The general scheme, while framed to meet the needs of the elementary student, will in its more advanced stages be so formed as to provide a higher education in architecture and academic design.

The advantages of the two years' Day School course are obvious, and although by no means intended as a substitute for pupilage, the course so trains the student as to enable him at its conclusion to take the fullest advantage of the time spent by him in an office as an articled pupil.

Enquiries should be addressed to the Secretary of the A.A., 18, Tufton Street, Westminster.

Architectural Development and Copyright.

BY H. GUICHARDE TODD, F.S.A. (Scot.), M.S.A.

HE love of novelty is one of the ruling passions of human character and is as evident in art as in other spheres of human action. Anything novel, whether good, bad, or indifferent, attracts attention, and the love of novelty is apt to over-rule the dictates of reason and discrimination. Curiosity is the first emotion of childhood, and the first expression of mental activity, and the attention paid to novelty, in most cases, last throughout life. Fresh discovery in science is the natural objective of the scientist; he has all the mysteries of creation as a field of action; and although scientific discovery may appear at times to be extremely novel, and a departure from precedent, the scientist is bound by elemental laws and forces which make each discovery necessarily a development from some proved and accepted elucidation of former problems. Natural progress in architecture as a science and as an art is very similar except for the great difference due to architecture being an art as well as a science. The continual striving after discovery and novelty in science and art is necessary for progress, but whereas in science the rate of progress is only bound by the limitations of matter and physics, in art and architecture the rate of progress is limited: firstly, by scientific discovery as it affects human life; and secondly, because reticence is the strength of architectural art, and any apparent striving after discovery or novelty detracts from its general excellence. Science is a development, almost boundless in its scope, and architecture is also a development but reflective and imitative—a reflex of human life, developing and advancing as scientific discovery alters the conditions of life, and largely imitative because man's necessities in the various strata of social life remain much the same, the changes of conditions of life being very gradual.

Any striving after novelty in architectural art is greatly to be deprecated, as it would inevitably mean the dissolution of the principles which govern the natural and true development of architecture as an art expressive of the natural and true development of man and the circumstances which envelop him.

The real danger of the Architectural Copyright Bill lies in the possibility of such legislation forming a professional atmosphere, the true reflex of which will be evidenced in buildings which individually strive by novelty to have a copyright value.

Mr. J. W. Simpson, F.R.I.B.A., one of the most strenuous supporters of the Architectural Copyright Bill, says, in a letter to *Country Life*, "The whole range of artistic biography shows the spur of need and the hope of reward—either in gold pieces or in admiration, or in both—to be necessary for the artistic temperament to produce its finest work. Were it otherwise, the masterpieces would come from men of private means, and the needle's eye would offer no difficulty to the rich man's camel."

This may or may not be true, but it is evident that the second clause of the quotation from Mr. Simpson's letter is in no way necessarily correct even if the first be taken for granted, and only serves to emphasize the emphasis put on gold by giving that precious metal (in coins of the realm) the precedence of admiration as an incentive to the production of fine work.

The Bill will give Copyright a definite commercial value and it is obvious that the desire for gold pieces will create a desire for Copyright and novelty in architectural design; the tendency will be for the architect to pander to his client's desire for novelty instead of restraining it.

"The hope of reward" may be necessary for the artistic temperament to produce its finest work, but it does not necessarily follow that *pecuniary* reward is the great incentive of the architect and artist. To base important legislation in the name of art on such an assumption is not only without precedent, but without any apparent and sufficient authority and an instance of the architect's inability to apply the first principle of building to any matter outside the routine of his professional work. A solid foundation is essential for success in architectural works or architectural policy, and something more solid than the assertion that "the hope of reward is necessary for the *artistic temperament** to produce its finest work" is required to justify the interference with the natural progress of architectural art likely to result from the initiation of the Architectural Copyright Bill.

If the assertion were that "the hope of reward is necessary for the average architect to produce his finest work" (or to get someone else to produce it for him), this would simply resolve itself into a professional matter of obvious truth and little importance, but the assertion is that our architects of the past, whose works were sufficiently interesting to warrant biographies, produced their conceptions while their artistic temperaments were obsessed by the desire for reward, "either in gold pieces or in admiration, or in both," and that such obsession was necessary for their conception. The assertion is that present-day architects of artistic temperament produce their finest work under the same circumstances, and that the future of architectural art is dependent on the same ideals. The usually accepted idea is that the artistic temperament is notoriously careless as regards monetary rewards, and sometimes heedless of admiration, although, admiration may be acknowledged to be the all in all to most persons of artistic temperament. The greatest possible reward to the designer of artistic temperament must surely be the sincerest form of admiration imitation—the founding of a school of artists whose productions will be developments of the broad principles laid down by him and which are characteristic of his work.

The highest pinnacle to which the artist or architect can rise is surely that eminence which the excellence of his own work gives him and which enables him to lead others

to that appreciation and understanding of form and beauty which is his and which in the interests of art it is his duty to impart to others passively if not actively. The passive lead or tuition is given by the architect who builds in the best manner, and active tuition is given by the professor, lecturer, or teacher.

If, as Mr. Simpson says, history has proved that "the hope of reward.... is necessary for the artistic temperament to produce its finest work," and reward is the alpha and omega, and that principle is to be adopted, it follows that, just as the tendency will be for architects who build to safeguard their Copyright to the uttermost penny, so will the tendency be for professors and teachers to retain the best that is in them until the greatest reward can be had—five per cent. and Copyright value.

Under the Bill, it appears possible for the architect or professor to proceed against his own pupil for infringement of Copyright, so that our art which is acknowledged to be in a very unsatisfactory state of progress is to be the subject of legislation, based upon (according to Mr. Simpson) a fundamental law in human nature which will introduce distinctly disturbing elements.

This fundamental law, if it is a fundamental law, is of the lowest grade and should certainly be repressed rather than encouraged, ignored rather than openly recognized.

Art in architecture is subject to environment and is usually detrimentally affected by the many influences which appertain to the practice of the profession. The struggle between art in building and these detrimental influences is the greatest problem, and yet, the promoters of the Architectural Copyright Bill appear to be introducing an insidious and subtle element of difficulty which amounts to a legal interference and environment in the realm of art.

Mr. M. H. Spielman, F.S.A., in a recent article in the press makes a somewhat unnecessary apology for those artists whose works are based, or appear to be based, on the works of other artists, mostly of a former age, by attributing any resemblance between their works of art to "tricks of memory," or a subconscious remembrance of works seen but forgotten. Art is necessarily imitative; it is a development; and discriminating imitation is the life of true art, and the only safeguard against the great apparent striving after novelty which is apt to be considered originality.

Precedent is not an absolute necessity, but to all but the inspired (who are few and far between), is the only rational basis from which the artist, sculptor, or architect, can hope to develop a work of art true to the age which he represents. Art as expressed in pictures, sculpture, and buildings (but chiefly buildings), is generally acknowledged to be a reflex of its age, and, just as the conditions of life change gradually, so must the art which reflects life change gradually or become unnatural and out of place.

The scope of art is wide, yet limited, and the artist of merit who bases some work, meritorious in conception and execution, on some true reflex of some interesting

former age by expressing its modern significance, may do much to forward the natural development of art, and need not excuse himself for any subconscious remembrance of work which he has seen and admired.

The unconscious copying mentioned by Mr. Spielman is an undoubted fact, an obvious fact, and a natural fact, for man is not naturally a creator but a developer of the resources which are at his command, and therefore, this developing or comparative originality is naturally the aim of all.

Mr. Spielman says, "painting, sculpture, architecture—it is the same with all of them. Every new work makes it harder for those who follow to be original," and it is here that the menace of the Architectural Copyright Bill comes in. Our architecture is surely sufficiently devoid of unanimity of aim to satisfy the most inartistic, but an aim is now supplied, an aim which will probably be greeted with great cordiality—the aim of the value to be created in creating a design different from anything else ever produced!

Are architects to be penalized for "unconscious copying"? And are the Law Courts to be further congested by subtle questions as to whether similarity in design is conscious or unconscious, or, as is possible, a somewhat similar solution of a common problem?

It must be remembered that architects vary as greatly as artists in efficiency, and that it is better for the art they represent that many of them should imitate rather than design.

"It is by imitation far more than by precept that we learn anything; and what we learn thus, we acquire not only more effectually, but more pleasantly. This forms our manners, our opinions, our lives. It is one of the strongest links of society; it is a species of mutual compliance, which all men yield to each other, without constraint to themselves, and which is extremely flattering to all. Herein, it is that painting and many other agreeable arts have laid one of the principal foundations of their power."

Ancient and Modern Delhi.

Mr. Salkeld, the City Engineer of Delhi, in a long and interesting article in *The Surveyor*, expresses the opinion that of the many ancient buildings the following are the most important.

Kutab Minar.—One of the architectural wonders of the world, a graceful fluted column, which rises to a height of 238 ft., and from which may be seen the whole plain studded with the ruins of former cities.

The history of this building is uncertain. It is reputed to have been built by the Hindus before the Mohammedan conquest, and to have been altered about A.D. 1200 by the Mohammedan Emperor of India, Kutab Uddin, after whom it may have been named. It is built of the local stone, faced with red sandstone, which is covered throughout with beautiful varied designs, and bands of writing, in raised Arabic characters of chapters from the Koran.

The Iron Lath or Pillar.—Close to the Kutab Minar this wonderful relic of the Hindu period occurs. The pillar is about 24 ft. long, and weighs approximately 6 tons. It is a striking example of the ingenuity of the people who lived 1,600 years ago, who were able to produce this pillar of rustless malleable iron.

Adjoining the Minar and Iron Pillar occur the great arches of a former mosque, the walls of which are covered with writings from the Koran in raised Arabic characters.

The Mohammedan conquerors fortunately did not destroy all traces of the ancient Hindu Temple which existed here, but made use of the exquisitely carved columns. As every inch of these columns was covered with carvings of human figures, animals, and other designs, the Mohammedans, in order to comply with the requirements of the Koran(which does not allow the human figure to be portrayed), lime-plastered the columns, and in this way, though the last thing they wished for, have preserved to this day these beautiful examples of ancient art.

Many other buildings of beauty and archæological interest abound, and the ancient fortifications of four cities may be traced. Mosques and tombs of emperors and other great personages abound, but these, though architectural glories, are too numerous to mention. The period covered by these structures is from 1193 to 1857, and they represent the various styles known as: Earliest Pathan, 1193-1320; Middle Pathan, 1320-1414; Later Pathan, 1414-1556; Mogul, 1556-1660.

The most important buildings of modern Delhi are the Fort or Palace, of which the Diwan-i-Am, or the Hall of Public Audience, and the Diwan-i-Khas, or Hall of Private Audience, form part.

The Fort is built upon the west bank of the Jumna river, and is almost a regular parallelogram, 1,600 ft. wide from east to west, and 3,200 ft. long from north to south. The walls are very high and massive, and are built of red sandstone. There

are two main gates. The principal one is known as the Lahori Gate, in continuation of which is a magnificent vaulted hall, 375 ft. in length, like the nave of a huge Gothic cathedral. This is said to be the finest entrance to any building in the world.

The Diwan-i-Am is built of red sandstone in the Hindu style, and consists of sixty pillars of red sandstone supporting a massive stone roof.

In this hall is a raised throne of carved marble, and at the back of the throne the wall is covered with beautiful designs in mosaic.

The Diwan-i-Khas.—An exquisite marble building, the walls of which are inlaid with coloured stones forming beautiful designs. Originally precious stones formed parts of the designs, but in the sack of the city by Nadir Shah and others these have long since disappeared.

In one room is a Persian couplet in letters of gold:

"If paradise be on the face of the earth, It is this, it is this, it is this."

In this hall formerly stood the famous Peacock Throne, valued at £2,600,000. This was carried away at the sack of the city by Nadir, Shah of Persia, in the year 1739, and is now at Teheran.

The baths and other buildings in continuation of the Diwan-i-Khas and the Rang Mahal, or women's quarters, are only second in beauty to the main building. The pierced marble work is so very beautiful and in parts so delicate that it looks more like lace than stone.

In modern Delhi are many beautiful mosques and Hindu temples, but the Juma Musjid, the most important mosque in India, is the only one to which reference can be made.

This musjid is built on a very large scale. The interior courtyard measures 400 ft. each way, and the roofed portion 260 ft. by 90 ft. The building, which stands high on an outcrop of rock, is opposite the Fort, and is constructed of red sandstone surmounted by three white marble domes and two lofty minarets, also of white marble and red sandstone. These stones harmonise, and the architectural effect is most pleasing.

School Classroom Planning.

Mr. William H. Webb, in a paper read at the Royal Sanitary Institute Congress at Belfast, says, the chief object to be borne in mind in the planning of the classroom is to secure the concentration of the scholar on his work, in which he is assisted by the voice of the teacher, and to afford the teacher complete control of the classroom, isolated and independent, without communication of any kind with the adjoining classrooms. In this respect the general practice in Continental schools is a striking improvement on that of many English examples, in which glazed doors and glazed movable partitions between the classrooms are much too freely introduced. Having regard to the many complaints which are made as to noisy schools, and the throat hoarseness of teachers resulting therefrom, it is remarkable that this point has not received greater attention by school medical officers and architects.

The *length* of the classroom should be determined by the acuity of vision of the scholars and the vocal energy of the teacher, and the *width* should be limited by the application of the rules given in the paragraphs dealing with lighting.

The application of these two rules has resulted in the adoption in nearly all countries of a rectangular classroom having length and width in the proportions of 3 to 2 or 5 to 3. These proportions insure good lighting for all desks, afford better facilities for supervision by reason of a narrower angle of view of the teacher and the superior acoustic properties of the room.

The height of a classroom, which should not exceed 13 ft., is determined by the question of acoustics and of cost. Many Continental authorities consider that the width of a classroom should not exceed one and a half times its height, which view is confirmed by Dr. Kerr, Medical Officer (Education), London County Council, who has recently stated that classrooms should not exceed 20 ft. in width.

Walls and Finishings.

If the suggestions contained in the report of the recent Departmental Committee of the Board of Education on the cost of school buildings are adopted, buildings of the permanent type, of which the notes under this head mainly treat, may be designed by the architect in the various methods of reinforced brickwork or concrete, so successfully employed in other structures; and for those division-walls between classrooms, clinker breeze, hollow and solid concrete, partition blocks offer considerable advantages in regard to facility of construction and economy in cost.

The use of glazed-brick dadoes—which is, in any case, open to many objections—would not be practicable with walls of this description. Glazed tiles—which, however, are open to similar objections—could be employed if desired; but, in the author's opinion, the use of a cement dado is much to be preferred. The portions of the walls above the cement dado and ceilings require to be finished with a plaster of

School Classroom Planning.

a much softer description than that generally used, both for acoustic reasons and to prevent undue condensation. All the surfaces should be brought to as smooth a face as possible, with the internal angles between walls and ceilings rounded in the plaster.

The colouring of the walls should be most carefully selected, as the value of reflected light from suitably selected tints cannot be over-estimated. The most suitable tints for this purpose are those of the sage-green or eau-de-nil, containing a proportion of about two-thirds of body-white. But the dadoes should, of course, be finished with a darker tint, with a plain line band as border.

Floors.

None of the materials at present used for flooring meet with all the requirements of an ideal classroom floor, which should be noiseless, warm to the feet, hard-wearing, free from liability to splinter, *jointless*, of such a character as to be easily cleaned, and, whilst combining these qualities, should be inexpensive in cost and maintenance.

A further point of great importance is the necessity of preventing, as far as practicable, the nuisance and danger to health arising from dust, which is now being dealt with by school authorities in a variety of ways. Oil, dust-allaying preparations, and other discolouring and evil-smelling compounds are being used for this purpose. Apart from other objections, this method involves continual annual expense, which it should be the aim of the school architect to avoid.

Monolithic floor-coverings, of which there are several kinds, having a basis of sawdust, asbestos, and cement, with a colouring pigment, are now being introduced into this country; but in those countries where this material has been more extensively used, experience has shown that, while it presents considerable advantages from a hygienic point of view, it does not, in practice, give the desired results, owing to its friable character and the liability to fracture under changes of atmospheric conditions when laid in large areas, such as school classrooms.

For some years linoleum has been used for the purpose of covering floors in class-rooms in America, France, Germany, and Switzerland, and the results obtained have been so far satisfactory that in those countries there is an increasing demand for its use for this purpose.

This material, when laid and glued on a smooth and solid surface, is one which should be strongly advocated for classrooms in all localities where the character of the shoes of the children would not be likely to cause undue wear and damage to the material. It presents an easily cleaned, impermeable, and noiseless surface, and, when laid as described, has great resistance to wear, whilst combining all the desired before-mentioned conditions.

The cost of laying linoleum compares favourably with batten, parquet, or woodblock floors, and the facility and economy with which cleaning and repairs can be effected are points of considerable importance. In the case of three-story buildings in town schools, the saving in the height of the building, owing to the less thickness of linoleum compared with that of wood-block or batten flooring, is also a point for consideration.

Apart from any other considerations, the gain from the point of view of hygiene alone is sufficient to warrant the extended use of this material.

Aspect.

The aspect of a classroom should determine the method of planning or lay-out, and the orientation of the building should be such as would secure for as many of the classrooms as possible that aspect which gives to the rooms and desks ample lighting, while securing beneficent sunshine for the longest period. Education authorities should note that sunshine is unequalled as a germicide, and costs nothing. Many authorities, in this and other countries, agree that the best aspect for classroom purposes, from all points of view, is that to the south-east.

Far too little attention has been given to the matter of aspect in England, where for a considerable part of the year there is an almost total absence of sunshine. It is remarkable to note in regard to some of the latest schools, and the publicity given to various types, and the advantages claimed therefor, mainly in matters of ventilation, that this vitally important point, affecting the health of the scholar and the warmth of the building, does not appear to have received that consideration which the benefits to be derived therefrom would merit.

Lighting.

Natural.—Unilateral left-hand lighting for classrooms is universally recommended and adopted. Bilateral lighting is not to be recommended, on account of its forming double shadows. It is prohibited in many countries, and generally condemned by all Continental authorities and hygienists. It is only approved by certain authorities, and then conditionally upon the light from the right-hand being differentiated in extent. Equi-bilateral combined with rear lighting, whilst overcoming the objections to bilateral lighting alone, results in extravagance in building cost and waste of playground area in planning, and cannot, therefore, be recommended on grounds of economy.

Such authorities as Cohn, Javal, Gariel, Truc, and others agree that, to secure good lighting, each desk (photometrically measured) should have from 10 to 20 lux or mètre candles with a fixed minimum of 10 lux, but with a higher minimum of 15 lux for classrooms devoted to the purposes of sewing, drawing, etc. The generally accepted rule of the window-glass area in relation to the floor area is in the proportion of 1 to 5. This rule has been applied to English schools for many years, but under different conditions from those obtaining on the Continent—that is, to classrooms containing four and five rows of dual desks—whereas those in the Continental schools have, as a rule, only three rows.

School Classroom Planning.

In modern schools of the pavilion type, where the upper portion of the classroom is partly contained in the roof, with a large window carried up to the highest part of the ceiling-level, and the side windows, by reason of the gable, being at a lower level, the deficiency in effective light area is more marked. This has been overcome to some extent by providing supplementary right-hand lighting by means of borrowed lights, which do not supply that quality and direction of light necessary for efficient study, and on dull days are practically valueless. Not only are the known rules of lighting not complied with in these cases, but there is also a loss of light by reflection which might be obtained from light-coloured opposite walls. Moreover, these supplementary windows are a contributive cause to the resulting "noisy" school.

Artificial.—The artificial illumination of elementary school classrooms has not hitherto been considered of much moment; but in view of the increasing demand for the use of schools in the evening, and the possibility of compulsory continuation classes, the necessity for a consideration of present methods of lighting—such as naked bat's-wing burners, incandescent gas, and electric-bulb pendants—is apparent.

Dr. Bishop Harman, in a recent paper on "The Artificial Lighting of Schoolrooms," read at a meeting of the Illuminating Engineering Society, offered suggestions which deserve careful consideration. These suggestions, and the exceedingly valuable ensuing discussion, form a basis on which some definite conclusions may be drawn, and which, summarized briefly, are as follows:—

- (1) The rules of left-hand lighting should be observed in that portion of the room occupied by the children.
- (2) Complete absence from the glare of inconveniently placed or imperfectly shaded light is essential.
- (3) No unscreened, unduly bright source of light should be visible in the direct line of sight from the desks or from the blackboard.
- .(4) An illumination of at least 3 foot-candles is desirable, and in some rooms 4 to 6 foot-candles should be provided.
- (5) Special attention should be given to blackboard-lighting by lights completely screened from the eyes of the scholars.

As to the relative methods of the various illuminants—oil, gas, or electric light—it is not within the scope of this paper to treat. The illuminant will doubtless be a matter of local consideration. But whatever the description of lighting employed, the principles or methods of (a) indirect illumination by reflection from the ceilings, adopted in several London institutions and in some of the newer German schools, and (b) refraction of light by (1) prismatic shades and (2) prismatic bowls, where used for electric light, appear the best to be recommended for school purposes. The value of light, photometrically measured, of distributed illumination gained, and economy in cost of installation and maintenance, should be considered together when selecting the illuminant.

School Classroom Planning,

Ventilation.

Recent investigations are convincing and conclusive that some means of "through" or "cross" ventilation by ample natural perflation, obtained by external windows, is absolutely essential for perfectly ventilated classrooms.

Through ventilation, however, has not been advocated or adopted on the Continent to any degree, nor after the manner seen in many of our recent schools, which have been designed with this object in view. But a means of obtaining through ventilation, although not direct to the external air on the one side, has been attempted by placing centre-hung or swing windows at a point as high as possible in the corridor-wall side of the classroom. The corridors being of ample dimensions, and supplied with large windows to the external air, such corridors become large fresh-air ducts or foul-air ducts, according to circumstances. While this system would not provide the frequent air-flushing aimed at in some of the newer schools in this country, with bilaterally-placed external windows, it is claimed that a sufficient replenishment of the air of the classroom is effected, whilst avoiding the excessive draughts and additional cost for heating incurred by the newer English "through ventilation" method.

Heating.

Heating by means of steam or hot-water radiators has not entirely supplanted the open fireplaces in classrooms; but the central system of supplying heat is one which should be recommended for all school purposes, having regard to (a) the difficulty of satisfactory planning of fireplaces, (b) the saving in cost of caretaker's labour, (c) the nuisance and danger from dust and from fire, which are objections always present in the case of open fireplaces. Properly screened open fireplaces, in addition to the other means of heating, should, however, always be provided for the babies' room.

A Universal Building Act.

Mr. Albert D. Greatorex (member), in his Presidential address to the Institution of Municipal and County Engineers, suggests that the present building by-laws should be remodelled, or a universal Building Act adopted, which should be compulsory; and power should be given to each district, subject to the Local Government Board, to frame regulations as to the minimum size and strength of material to be used in the construction of buildings, drainage, and so forth. They should be concise, deal consecutively with the various subjects, follow the same order in which they usually have to be dealt with in building operations, be provided with a full index, marginal notes, explanatory illustrations and diagrams.

In framing these regulations, greater latitude should be given to each district, making them vary according to the requirements of each particular district. They would not then be so cumbersome and unnecessarily lengthy. At the same time, definite rules should be laid down, as it would be dangerous to make them too elastic, or they would not be properly enforced.

Power should also be given to charge fees for the supervision of all buildings, on the same lines as is done in London under Building Acts and several other towns under Probate Acts.

The American architect has also something to say on this matter and holds the view that if it were possible to draft comprehensive rules governing the use of structural materials in buildings and then enact those rules into laws applicable throughout an entire State, it would seem that some progress had been made. It is readily apparent that certain restrictions as to character of buildings permissible in certain localities would be necessary, but a considerable degree of uniformity might be secured if such features as allowable stresses in various materials, ingredients of mortars and concretes, the bearing power of different classes of materials encountered in foundations, requirements of sanitation and many similar matters were determined. It might also be feasible to define the various styles of construction and classify the buildings belonging to the various types prescribing the construction of each. To each individual community might safely be left the determining of limits within which only buildings of fireproof or other class could be erected. Also other matters, such as heights, court areas, etc., which would depend largely on local conditions and might vary greatly with them, could not well be included in a general code, but such features are not the cause of present unsatisfactory conditions.

A distinctly progressive step has been taken in Pennsylvania. A joint resolution providing for the appointment of a commission to investigate the manner of construction of buildings in the State and to determine the strength and character of materials and to codify the laws in relation to buildings has been introduced into the Senate.

Passenger Boat Architecture.

Not one in ten of the many thousands who annually travel the great lakes and upper St. Lawrence, says Construction, possibly ever stops to consider the extent to which decorative architecture has entered into the interior scheme of the modern passenger and excursion craft. A still less number perhaps has any conception that the architect has anything to do with this class of work—especially the same architect who has something to do with the designing of buildings ashore. And vet, if the average person would exclude from his mind the fact that he is on the water, he might find it difficult, colloquially speaking, to "know whether he was on land or at sea," so decidedly, indeed, is the feeling of domesticity expressed in the scheme as to make the interior decorative character of the modern lake boat not unlike that of a well appointed modern hotel. The great change that has taken place in this respect is more apparent when one takes into consideration some of the early steamships still in service, whose interiors were arranged by the boat designer and finished by the carpenter and painter. By comparison, these older boats bear the same relation to the more recent crafts, that the early habitation does to the better considered residential structure of the present time. Fortunately in steamship construction as in residential work, a new order of things has come to obtain. The naval designer and the architect now work in association, the former as before dictating to a great extent the general arrangement of the boat, while the latter applies his artistic ability to make it more habitable and more inviting in general appearance.

Nothing more is required to demonstrate what is being accomplished in this direction than the several steamships comprising the fleet of the Richelieu and Ontario Navigation Company, operating between Toronto and eastern points. The steamer "Toronto" is a particularly noteworthy example to which attention might be called. Take for instance the main entrance hall with its vast and roomy effect, and contrast it with the utilitarian scheme that the older boats employed. This hall, with its interlocking rubber tiling, high mahogany panelling, and frieze of Canadian historical subjects, is a most pleasing introduction to the character of appointments which greet the eye of the traveller as he rises between the stately columns and graceful balustrades of the broad, easy ascending stairs. The frieze is executed in Caen stone and is a beautiful specimen of the modeller's art, depicting important events and periods in Canadian history; the figures being in low relief.

From this part of the boat one passes to the main saloon, which, together with the gallery above, is carried out in a treatment characteristic of the period of Francis I., with white enamel panelling and effects. Both here and in the Louis XVI. dining room, which is finished in white enamel with richly embellished walls inset with amber-toned panels, the general atmosphere is one of luxury and refinement. The

great care given to the detail of furnishings, can be better appreciated when it is known that the furniture, fixtures and carpet were made after the architect's designs.

Careful attention to detail is also in evidence in the smoking room, which is decorated in Oriental style with beamed ceiling, green stained chestnut woodwork and richly stencilled walls; and again in the writing room is finished in mahogany with leaded glass windows and decorated walls.

In pointing out the marked departure from the purely utilitarian that has been effected through the architect's skill. It must be said that the architect has not hesitated to enlist the services of his fellow worker in the allied arts when necessary to develop some especial feature essential to the success of his work. For instance, in the main entrance hall of the s.s. "Montreal," which is carried out in the Modern French style with mahogany woodwork, is a series of panels representing the "Four Seasons," modelled by J. S. Bank, the Toronto sculptor; while at the head of the staircase leading to the gallery of the main saloon is a painting of Cardinal Richelieu by Sugar Cote, a well-known Canadian artist, which adds interest to the Louis XV. scheme. The dining room of this boat, is in character with the entrance hall, being in Modern French style, decorated chiefly in tones of green.

The Jacobean entrance hall of the s.s. "Kingston," panelled in dark oak with heraldic staff frieze and rich ceiling, is a beautiful interior; but even here the scheme fails to equal the decorative character of the midship saloon, which is carried out in Empire style and lighted from above by a coffered ceiling having a mural painting by F. C. Challener, R.C.A., above the cornice at either end. Throughout the boat, the rooms are palatial in their appointments, the dining room being decorated in Georgian style with the color scheme in mahogany and white.

A treatment somewhat varied from any of the interiors of the above boats, is seen in the s.s. "Rapids King," which is carried out entirely in Modern Mission style with the main entrance hall in oak stained a very dark brown, and rich wine color panels. An interesting feature of this steamer is the promenade deck, which is arranged as an enclosed observation room and finished with dark oak with a light colored beamed ceiling.

Another boat which shows an interesting treatment in the Modern Mission style is the s.s. "Cayuga," of the Niagara Navigation Company line. The scheme of rooms throughout have a most pleasing domestic character; the various interiors being carried out in different oaks and harmonious color combinations. The entrance is finished in green stained oak with panels of similar tone; the promenade deck in Flemish oak with panels of brown; and the smoking room is in dark oak with brown panels and white painted dome ceiling. In the dining room dark bog oak is employed, the panels having subdued tones of green; the generally quiet scheme of the room being given a bright relief by the red curtains at windows.

Efflorescence on Brickwork: Cause and Prevention.

The film of earthly salts which frequently appears on the surface of brickwork, and is known as efflorescence, detracts considerably from the pleasing appearance of the work, while the crystallization of salts within the pores of the bricks tends to cause disintegration by action akin to that established by frost. Moreover, efflorescence may cause damp places on the structure affected, destroying plaster and paint applied after the process has commenced.

Efflorescence, says the *Contract Record*, may be due to the presence of undesirable material either in the bricks or the mortar, or in both. Although far more common on quite new than on older walls, the deposit may be formed on any brick surfaces liable to be affected by the infiltration of water, and is always at its worst near eaves, rainwater heads, window-sills, and other places where rain is afforded opportunity for soaking into the bricks.

The deposit is generally white, but may be yellow or green, according to the composition of the clay used in brickmaking. It is merely a film of soluble salts carried by water from the interior to the exterior of the bricks, and made evident by crystallization on evaporation of the water.

The existence of efflorescent substances in bricks is due to one or more of the following conditions:

- (1) The use of clay containing soluble salts.
- (2) The use of clay tempering water containing soluble salts.
- (3) The formation in the kilns of soluble salts by the oxidation of minerals in the clay, or by the reaction of sulphurous kiln gases on the clay.
- (4) The introduction of soluble salts into the bricks after burning, generally from the mortar employed.

Surface clays usually exhibit a higher percentage of earthly salts than other deposits, and the same may be said of clay which has been covered by sea-water, clay containing iron pyrites, or ferric disulphide (FeS²) being another undesirable variety.

Even in cases where the clay is of approved quality, foreign substances of deleterious character are sometimes introduced which result in the formation of salts giving rise to efflorescence. One example of such treatment is the use of ashes, with the object of preventing shrinkage, and another is the adoption of sulphurous coal for burning.

It also happens occasionally that kiln-burnt bricks are impregnated with soluble salts either in consequence of badly-designed plant, or of inefficient management. Thus, after the dried bricks have been "crowded" into the kiln, and the process of

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heating up has been commenced, if the fires are kept only just high enough to evaporate the moisture in proportion to the chimney-draught, the process is unattended with prejudicial conditions. But if the moisture is evaporated too rapidly for the capacity of the shaft, the surplus vapour in contact with the bricks may absorb sulphur from the gases, resulting in the formation of sulphuric acid, which by combination with the carbonates and other salts will give rise to soluble sulphates, the most general cause of efflorescence.

Various methods are adopted for eliminating substances calculated to give unsatisfactory results. In clays capable of vitrification, the risk of efflorescence can be obviated by thoroughly vitrifying the bricks, and thereby converting objectionable salts into permanent silicates.

Clays known to contain soluble earthly salts can be rendered harmless by washing; but this method is commercially impracticable in the case of low-priced bricks. By exposing such clays to the weather for six months or more, rain and snow are utilised as cleansing agents, although it must be noted that this mode of treatment may have the effect of converting insoluble into soluble salts.

Chemical treatment is a more scientific expedient, performed in the case of clays prepared by the wet process by adding to the water used in the washmills such chemicals as will react upon the soluble sulphates and precipitate harmless compounds, the chemicals most generally employed being barium chloride and carbonate resulting in the precipitation of barium sulphate (BaSO4), which is only soluble to the extent of one part in 400,000 parts of water by weight. Even if soluble sodium salts are present, they would simply be converted into carbonate or chloride by the corresponding barium compounds, and being very soluble, these salts would be removed by rain quite readily if brought out by efflorescence on the surface of brickwork.

Chemical examination and purification of the water used in brickmaking are quite as necessary as treatment of the clay. Being perfectly simple and very inexpensive, the operation should never be neglected, as good clays are frequently contaminated by saline water. Efflorescence resulting from the introduction of soluble salts into the bricks after burning is usually due to the use in mortar of lime containing magnesia and other bases, which enter into combination with sulphur in the fuel employed for calcination, and form soluble sulphates. These are dissolved by water during the process of mortar mixing, and often find their way into the bricks, emerging later as efflorescence. Similar trouble may also be occasioned by the action of sulphurous gases from coal and coke burned in stoves for warming buildings, the effect being to form sulphates which may appear on the surface of the exterior brickwork.

From the foregoing, it is evident that efflorescence can be absolutely avoided by the employment of suitable bricks and mortar, by taking care to see that roofs,

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cornices, and gutters are watertight, and by preventing leakage of any kind from steam and water-pipes in ducts within the walls.

In cases when efflorescence occurs despite all reasonable precautions, the first thing to do is to stop any leakage of water into the brickwork, and if the trouble is caused by the penetration of rain from the outside, the surface may be treated by the application of alternate washes of soap and alum solutions, the former in the proportions of 2.2 lb. of hard soap per gallon of water, and the latter in the proportions of 1 lb. of alum per gallon of water. Instead of using common alum or potassium aluminium sulphate (K²Al²4SO⁴), it is more economical, and at the same time more efficacious, to employ aluminium sulphate (Al²3SO⁴) in the alum wash.

Surface deposits due to calcium sulphate, and, therefore, not carried away by rain, can be removed by scrubbing the face of the work with hydrochloric acid diluted with about five times its volume of water. Before the acid is applied, the brickwork should be thoroughly moistened, and all traces of acid removed after treatment, by washing the surface with water.

The October Examinations.

The examinations to qualify for Membership of the Society will be held as usual in London and also in provincial centres, in the first week in October.

Copies of the new syllabus may be obtained on application to the Secretary.

The following are the sections and subjects:—

Section I. ARCHITECTURE.

Planning, design, architectural history.

, II. BUILDING.

Construction and materials.

" III. PRACTICE.

Contracts, specifications, quantities.

" IV. SANITATION.

Ventilation, drainage, water supply, etc.

Students of the Society may take the examination by sections at a fee of 15s. tor each section, or in the case of students who are 21 years of age or over, the whole examination at one sitting for a fee of one-guinea-and-a-half.

Certificates of proficiency will be awarded in those sections in which a Student candidate qualifies, or a full certificate as the case may be.

A holder of the four sectional certificates of proficiency issued by the Society, or their equivalent in certificates of exemption, who has attained the age of 21 years, may apply for the full certificate entitling the holder to make an application for membership.

Pending the completion of the negotiations with the R.I.B.A., the possibility of this examination being the last to be held by the Society should be borne in mind by intending candidates.

Discovery of a Cistercian Abbey.

Excavations of considerable interest have, says *The Manchester Guardian*, been in progress at Vale Royal, the Cheshire seat of Lord Delamere, with the object of ascertaining the position of the Cistercian Abbey. It was known that a monastery had been erected in the locality in the Middle Ages; but neither plan nor record could be found showing the exact site or the extent of the building. The fabric was demolished after the dissolution of the religious houses by Henry VIII., and razed so completely that no trace remained of the structure. The only proof (if proof it could be called) consisted of a nondescript grouping of stones, collected on the estate and known as "The Nun's Grave." But doubt as to the site of the abbey has been removed by the generosity of Mr. R. Dempster, the present occupant of Vale Royal, who has defrayed the cost of the research.

Mr. Basil Pendleton, M.S.A., architect, of Brazennose Street, Manchester, entrusted with the control and direction of the excavations, was successful, after careful examination of the land and study of old illustrations and manuscripts, in fixing upon what he believed to be the site of the abbey church. His assumption turned out to be correct, and on commencing the excavations at Easter the first cross trench cut revealed the north wall of the choir, three feet beneath the surface. Further work led to the unearthing of the foundations of the abbey, one of the largest if not the largest of the Cistercian abbeys of the country. The parts exposed are on the north side of Vale Royal. The church stood east and west, with the cloisters on the south side; and the mansion was built on two sides of the cloister court, the position of the domus conversi forming the range of buildings on the west side now used as a residence, and the site of the refectory and other appurtenances constituting the south block being the domestic offices.

Tracing the north wall of the choir in a westerly direction the junction of the north transept with the main body of the church was found, and excavating this wall northward for a distance of 70 feet three skeletons were disclosed—one in a perfect state of preservation. The north transept, then excavated, contained three chapels at the east end, and made on the plan a square of 70 feet each way. A comparison of the church with the noted Abbey of Fountains came as a surprise, for it showed that the Cheshire monastery exceeded 400 feet from east to west, whereas the Yorkshire fabric totals only 385 feet.

Vale Royal was founded by Edward I. In peril of shipwreck, he vowed that if his life were spared he would endow a monastery. Legend says that on uttering his vow the storm ceased, and he was safely landed. The King laid the foundation-stone in 1277, and the abbey was consecrated in 1330, but it was not finished till later. After the Dissolution the monastery was purchased by Sir Thomas Holcroft, who immediately began its demolition, and stone being at the time a substantial asset in Cheshire he no doubt made a profit out of his bargain.

The Regulation of Architectural Competitions.

Last year the State Legislature of New York passed an Act to amend the public buildings law, in relation to competition for selection of architects for state work, which provides that except in certain cases the state architect shall prepare the drawings and specifications and supervise and control, as architect, the construction of all new buildings erected at the expense of the state, shall also prepare the drawings and specifications for additions to existing buildings, and for the alteration or improvement thereof. No municipality of the state shall have power to modify or change plans or specifications for the erection, alteration or improvement of state buildings.

The state architect is authorized, with the written approval of the governor, or upon his request, to obtain designs, plans and specifications by competition among architects for the erection of public buildings for the state of New York. All such competitions shall be under the supervision of the state architect, and on such terms and conditions as he may prescribe subject to the written approval of the governor. In each competition not less than five competitors shall be invited by the governor, each of whom shall receive a fee as hereinafter provided, and other architects so desiring, who furnish satisfactory proof to the board of award of possessing the requisite skill and ability to execute the work, shall be allowed to compete without invitation.

The designs shall be submitted to a board of award consisting of three members, one being the state architect, one appointed by the governor, who shall be a representative of the board or commission under whose jurisdiction the building is to be erected, and one an architect to be selected by the state architect from a list of six or more chosen jointly by the invited competitors. The board of award shall examine all plans submitted and shall select therefrom its first choice, and the selection so made shall be certified to the state architect, and the action of the said board of award shall be final.

The competitor submitting the designs selected as the first choice of the board of award shall be employed by the state architect as the architect for the buildings. He shall prepare the complete plans and specifications and when directed by the state architect shall locally supervise the construction, and for services rendered he shall receive a fee not greater than that now established by the schedule of charges of the American Institute of Architects. The general supervision of the work, and the approval of all drawings and specifications shall be exercised by the state architect, who shall perform all duties which now pertain to his office except as herein otherwise provided. The drawings submitted in the competition by competitors receiving

fees or prizes shall become the property of the state, and the successful competitor shall file with the state architect a copy of all drawings and specifications used during the course of construction.

The Main Object of Competitions.

The American Institute of Architects in a circular of advice relative to the conduct of Architectural Competitions state that a competition, when properly conducted, is a means for the selection of an architect. As an incident, a good preliminary scheme may sometimes be obtained, but the Institute is of the opinion that competitions are in the main of no advantage to the owner. It therefore recommends that, except in cases in which competition is unavoidable, an architect be employed upon the sole basis of his fitness for the work.

No competition should be instituted without the aid of a competent adviser. He should be an architect of the highest standing, chosen with the greatest care, as the success of the competition will depend largely upon his experience and ability.

Competitions are at best a slow and expensive method of choosing an architect; and it is unwise to attempt to save either time or money by not having an expert adviser.

It is prejudicial to the interests of the owner that an architect should be admitted as a competitor who cannot in advance establish his competence to design and execute the work.

As the owner should feel bound not only legally, but in point of honor, to retain as his architect, the competitor to whom the award is made, it is essential that he should select the competitors with the greatest care and in consultation with his professional adviser, including among them only those in whose ability and integrity he has absolute confidence, and to any one of whom he is willing to entrust the work.

The various recognized forms of competitions are specified, the Institute expressing the opinion that, unless cogent reasons prevent it, competitions should be of the limited form, and that it fails to see that the results of double competitions have in any way justified the length of time consumed by them or the trouble and expense imposed on all concerned.

Absolute and effective anonymity is a necessary condition of a fair and unbiased competition, and no statement of the intended cost of the work should be made unless it has been ascertained that the work as described in the programme can be properly executed within the sum named. In general it is wiser to limit the cubic contents of the building than to state a limit of cost.

The programme should neither require nor permit competitors to furnish their own or builders' estimates of the cost of executing the work in accordance with their designs. Such estimates are singularly unreliable. If the cubage be properly limited they are unnecessary, but if required, they should be made for all designs by one unprejudiced person employed by the owner.

To insure a wise and just award and to protect the interests of both the owner and the competitors, the competitive drawings should be submitted to the judgment of a jury so chosen as to secure expert knowledge and freedom from personal bias.

The purpose of an architectural competition is not to secure fully developed plans, but such evidence of skill in treating the essential elements of the problem as will assist in the selection of an architect. The drawings should, therefore, be as few in number and as simple in character as will express the general design of the building. Elaborate drawings are not necessary for a jury of experts whose judgment is rendered upon fundamental principles of design. Lengthy programmes and detailed instructions as to the desired accommodations should be avoided, as they confuse the problem and hamper the competitors.

UNPROFESSIONAL CONDUCT.

The Institute has declared in its Canons of Ethics that it is unprofessional conduct for an architect:—

- (1) To take part in any competition the terms of which are not in harmony with the principles approved by the Institute.
- (2) To attempt in any way, except as a duly authorized competitor, to secure work for which a competition is in progress.
- (3) To attempt to influence, either directly or indirectly, the award in a competition in which he is a competitor.
- (4) To accept the commission to do the work for which a competition has been instituted if he has acted in an advisory capacity, either in drawing the programme or making the award.

The Institute also holds that no architect should submit in competition a design which has not been produced in his own office or under his own direction, and that no competitor should enter into association with another architect, except with the consent of the owner, and that if such associates should win the competition, their association should continue until the completion of the work thus won.

The Revival of Collaboration.

Mr. F. W. Fitzpatrick, of Washington, expresses himself strongly on the subject of Architectural Competitions, and in an article in *Construction* makes a suggestion for reviving "Collaboration" in place of "Competition." Architectural competition, he says, never was, is not, and never will be an ideal way of selecting an architect. Not one owner in a hundred thousand has the qualifications necessary to a discriminating judgeship as to architectural merit; his selection is either a prejudiced personal one, or he is blandished by some trick of rendering, of glibness of tongue or vain promise of extraordinary or impossible achievement. If he selects a professional adviser it is rarely a great master, or a man of noted ability and keen sense of differentiation. The judge is seldom the peer—save in name—to many of

the competitors and with all the prejudices, the whims, the narrowness of the individual to which is often added an impaired digestion. The successful competitor is usually not the one who even attempts to do his best for the owner, or who honestly endeavors to solve the problem, but rather the one who best knows the judge's whims, and is shrewd enough to cater or pander to them. If there is a board of award the case is but changed in detail—not in principle; you get a compromise between half a dozen or more personal prejudices, and that's all. At best a competition is a delusion and a snare, and too often it winds up in a mess or a scandal.

Once in a while, in a free-for-all competition, a great light, a new genius is discovered, but it happens so seldom that we hardly need to sit up nights watching for the new star. I have known something of that kind to happen but twice in the past thirty years, during which period I have been more or less activity intimate with competitions. Indeed, there is scant opportunity for that sort of thing these days, as in most cases the big competitions, particularly those for public buildings, are "restricted." The eligible competitors are naturally the most successful practitioners and the big jobs seem to be, quite by accident, of course, portioned out with arithmetical precision and rotation.

Now then, instead of all this, that rarely conduces to the best results architecturally, why not call for "Collaboration" instead of the farcical so-named "Competition"? If the number of competitors can be limited, then certainly an owner may with equal justice select the local or other architect—in whose integrity and ability he may have confidence—to construct his building, to let contracts and all that sort of thing and then invite and pay one, two, four or more other architects to come in and collaborate with that one, pick his design to pieces, doctor it up, lambast it generally and then hammer it into shape. They'll evolve something worth while, too; and it's so much more sensible than the competition notion. Especially for Government work. In that the Government is adequately, if not admirably equipped with supervising architect and all the necessary machinery for superintendence, contract giving and all details that are infinitely better administered generally than is the case with private work. And surely is the Government architect more intimate with departmental needs than any outsider can be and in better position therefore to plan the structure to fit its purposes. So instead of going through the motions of competition, why not try and get our legislative bodies to pass a Bill authorizing the executive departments to invite and pay five or six architects to collaborate upon each new building, to discuss the design with the supervising architect, to work together to get up something useful and beautiful that will be the result of their united energies, skill and experience?

Unity in the Profession.

The Position in South Africa and New South Wales.

On December 19th, 1910, a Conference of South African Architects (organized by the Cape Institute) was opened at Capetown under the presidency of Mr. Arthur H. Reid, and which was attended by the following Delegates: Mr. Walter Reid (President of the Association of Transvaal Architects), Mr. J. F. Beardwood, M.S.A. (President of the Transvaal Institute of Architects), Mr. E. H. Waugh, M.S.A. (Hon. Secretary of the South African Branch of The Society of Architects, London).

A letter was read from the Natal Institute of Architects regretting its inability to send a Delegate, and expressing its sympathy with the object of the Conference.

The President, says the African Architect, in welcoming the Delegates, reviewed the correspondence that had passed between the four Institutes, which had resulted in the Cape Institute being deputed to draft a Bill for the Registration of Architects, for presentation to the Government of the Union of South Africa. The draft was completed and in the hands of all concerned, and as the Act now in operation in the Transvaal had been followed as closely as possible, he hoped there would be no serious objection to the result of his Council's labours.

Mr. Walter Reid said the Association of Transvaal Architects had affirmed the principle of an uniform Registration Act which would absorb all other existing institutes, and he was instructed to move for the appointment of a Committee to go into the whole matter at once.

Mr. E. H. Waugh said The Society of Architects of London, as represented by their South African Branch, favoured the federation of all professional bodies. There was a difficulty inasmuch as the Association of Transvaal Architects was an incorporated and registered body which the other institutes could not claim. His Society had affirmed the principle of Registration in South Africa, and had pledged itself to assist in promoting legislation to that end.

After a lengthy discussion it was resolved "That this meeting, consisting of members of the Cape Institute of Architects, representatives of the Association of Transvaal Architects, of the Transvaal Institute of Architects, and of the South African Branch of The Society of Architects of London, confirms the desirability of proceeding with the project of promoting and passing an Architect's Registration Act through the Union Parliament as soon as possible, and further that the Cape Institute be appointed to act as the medium of communication between the Profession and the Union Government.

It was further resolved that the discussion of details of the Bill with the Delegates from the Transvaal be left to the Council of the Cape Institute.

A vote of thanks to the Delegates for their presence and help was carried unanimously.

On the two following days meetings of Delegates with the Council of the Cape Institute were held under the presidency of Mr. Arthur H. Reid, when Mr. R. Howden, Vice-President of the Association of Transvaal Architects attended.

The preamble and every article of the Bill as drafted, were discussed, and resolutions taken upon each. It was finally resolved to provisionally pass the Draft Bill as amended, a fair copy of same to be submitted for final approval of the four South African bodies. The Conference then dispersed.

On January 17th, 1911, Mr. Arthur H. Reid, President of the Cape Institute, reported to his Council that he had interviewed the Clerk to the House of Assembly and the Minister of the Interior, the result being that the proposed Registration Act would have to appear as a Private Bill rather than as a Government measure. He had also placed the matter in the hands of Mr. Gus Trollip, Attorney at Law and Parliamentary Agent, who will review the Draft Bill and advise the Council in due course. On January 26th, 1911, the Council, acting under advice, and in view of the press of Legislative measures before the House of Assembly, decided to postpone the application for permission to submit the Bill.

The R.I.B.A. are drafting an Act with a view of obtaining statutory qualification at Home, and with this object in view are preparing a scheme of amalgamation with The Society of Architects, London, so that no opposition will be forthcoming from bona fide members of the profession. As the several Institutes of the Colonies of South Africa are affiliated to the R.I.B.A., it is hoped, says the African Architect, that such affiliation may lead to amalgamation and ultimately result in a uniform scheme throughout the Empire.

With the existence of such a scheme in the minds of many, it is suggested that all the Institutes and Associations of South Africa should amalgamate and sink their little differences in one embracive union, based on similar lines to the R.I.B.A. Bill and in sympathy with their ideas; the fact that the R.I.B.A. and M.S.A., both at present voluntary institutes, are prepared to make any sacrifices they each may have to make, with a view to obtaining a uniform statutory qualification, should be sufficient precedence for South Africa to follow; the existing Institutes and Associations are most confusing to the public and necessitate a great deal of time from several members of its profession which is not necessary, and the arguments used for the necessity of voluntary as well as incorporate associations cannot be of much importance when the Home societies have agreed to abandon such principles for that of unification in one large incorporated body registered by Act of Parliament.

The Council of the Association of Transvaal Architects have been devoting a great deal of time in connection with the new Union Act, which it is hoped will give greater powers to the new Association than does the existing Transvaal Act. It is stated that several defects have been discovered in the Transvaal Act which are

distinctly detrimental to the Association and its members, and that experience in law suits, etc., up to the present has necessitated some very radical changes to the wording and meaning of the Act, particularly as a result of the Court's interpretation of the different sections.

REGISTRATION OF ARCHITECTS IN THE UNION OF SOUTH AFRICA.

The African Architect publishes the full text of the proposed Architects' Registration Bill, 1911, which the Council of the Association of Transvaal Architects are now discussing, and which provides (inter alia) that six months after the coming into operation of this Act the Architects' Private Act, Transvaal, 1909, shall be repealed and this Act take its place, and all the assets and liabilities of the Association of Transvaal Architects shall be taken over and assumed by the Institute hereby incorporated. All members of the Association of Transvaal Architects will ipso facto become members of this Institute without paying the registration fee hereinafter referred to.

After the expiration of six months from the coming into operation of this Act no person shall describe or hold himself out as an architect or use any name, title, addition, or description, or letters indicating that he is an architect, whether by advertisement, by description in or at his place of business, or residence, by any South Africa are affiliated to the R.I.B.A., it is hoped that such affiliation may lead document, or otherwise, unless he is registered as an architect in pursuance of this Act.*

This clause shall not apply to any person resident outside the sub-Continent of South Africa, who is entitled to register under Clause 8a, but such person must apply for registration if resident in the Union of South Africa for a longer period collectively than one month in five years, he shall, however, be entitled to practise after having made his application for registration until he has been accepted or refused. Nor shall it apply to any person engaged solely in the capacity of Architectural Assessor.

Any person contravening any of the provisions of section *one* hereof shall be liable to a fine not exceeding one hundred pounds for each offence and in default of payment to imprisonment for a period not exceeding six months.

Upon the coming into operation of this Act there shall come into existence a body corporate entitled "The South African Institute of Architects" with perpetual succession and the right to use a common seal and to sue and be sued in its corporate capacity, and the said body corporate shall be capable in law of taking and holding any movable or immovable property for the benefit and purposes of the Institute with power to dispose thereof, but so that the Institute shall apply its funds and assets in promoting the objects of the Institute and shall not at any time pay any dividend to its members.

^{*}Membership of The Society of Architects is a qualification for Registration under this Act.

Unity in the Profession.

Every person registered as an architect as hereinafter provided shall upon such registration *ipso facto* become a member of this Institute.

Upon the coming into operation of this Act, there shall come into existence a Provisional Council comprising four local committees, and consisting of a total of 17 members in proportions as hereunder mentioned:—

Transvaal Local (Committee	е	 	 7
Cape Province	"		 	 5
Natal Province	,,		 	 3
Orange Free State	31		 	 2

Total forming the Provisional Council 17

NOTE.—The names of the members to represent the several local Committees to be selected as follows, and before the Draft Act is complete, and their names only to appear in the Act opposite their respective Province.

Transvaal.—To be elected by the Association of Transvaal Architects and to include the President of the said Association.

CAPE PROVINCE.—Ditto, Cape Institute of Architects.

NATAL PROVINCE.—Ditto, Natal Institute of Architects.

Orange Free State.—Ditto, resident members of The Society of Architects.

The Provisional Council shall open a register in which any person shall be entitled to be registered as a member in pursuance of this Act who proves to the satisfaction of the Provisional Council within six months next after the coming into operation of this Act that at the date of the coming into operation of this Act he was resident and domiciled in British South Africa, and possessed of the following qualifications:—

- (a) Was a member of the Cape Institute of Architects, Natal Institute of Architects or of any other institute or society of architects of equal standing; or
- (b) Was publicly and bona fide practising as an architect in South Africa prior to 31st December, 1910; or
- (c) was at such aforesaid time, or prior to the coming into operation of this Act, engaged as an assistant to an architect in South Africa and has had at least seven years' professional experience; or
- (d) that he is possessed of qualifications and experience which may be declared by the Governor-General-in-Council by proclamation to be equal to those in one or other of the foregoing instances.
- (e) Though belonging to no Institute or Society of Architects, has been publicly and in good faith practising exclusively as an architect in any portion of British South Africa for a term of four years prior to the date of this Act and was still so practising at that date provided he can produce

Unity in the Profession.

- (1) regular articles of indenture for a term of three years, or evidence that he has served previously as an assistant to an architect for four years, making a total of seven years' experience; and
- (2) sufficient documents in support of work done during the four years' private practice, also sworn affidavits that he has originated and composed architectural designs and carried them into execution; or
- (f) was employed and salaried for such employment in British South Africa exclusively as a responsible architect; provided that he can produce
 - (1) letters of appointment in such capacity and employer's testimony or other evidence of satisfactory service;
 - (2) sufficient documentary evidence in support of purely architectural work done and carried into execution during that period, also sworn affidavits that such work was his own and original composition; and
 - (3) has had such previous architectural experience and engagements as may make up a total period of seven years' employment; or
- (g) was engaged in British South Africa as an assistant to an architect who is entitled to be registered under this Act provided he can satisfy the Provisional Council that he has had at least seven years' experience exclusively in architectural work.

At the expiry of the six months mentioned as the limit of the authority of the Provisional Council the powers of such Provisional Council shall be transferred to the Council hereinafter mentioned, who shall thereafter deal exclusively with all applications for registration that may be received after the expiry of the said six months. The Provisional Council is to deal definitely with all applications received by them within the term of their authority, and if necessary the term of such authority may be extended by the Council for the completion of the special duty connected with such applications for registration.

Upon the expiration of six months from the date of the coming into operation of this Act no person shall be entitled to be registered in the said register as an architect unless he shall prove to the satisfaction of the majority of the whole Council hereinafter mentioned.

- (a) That he is possessed of the diploma of the F.R.I.B.A. or R.A. or A.R.A. or other diploma of equal qualifications or experience which may be declared by the Governor-General-in-Council equivalent to the diplomas referred to in this sub-section.
- (b) That at the date of his application for registration he is resident in British South Africa and has attained the age of twenty-one years; and
- (b1) has passed the examination for associateship of the Royal Institute of British Architects or the examination for membership of The Society of Architects of London or the examination or examinations conducted by the Council and prescribed by the bye-laws of the Institute or some other examination which may be

declared by the Governor-General-in-Council by proclamation to be equivalent to one or any of these examinations, and has in addition had at least four years' professional training and in addition one year's practical experience as an assistant to an architect; or

- (b2) that prior to, or at the time of, the coming into operation of this Act he was registered as an associate of the Royal Institute of British Architects or as a member of The Society of Architects of London or as a member in any class of the Association of Transvaal Architects, or of the Transvaal, Cape, or Natal Institutes of Architects or of some other Society or Institute of Architects which the Governor-General-in-Council may by proclamation declare to be of a standing equal to that of one of the said Institutions.
- (b3) that he is possessed of qualifications and experience which may be declared by the Governor-General-in-Council by proclamation to be equal to those in one or other of the foregoing instances.

The following acts and practices, whether of commission or omission, upon the part of any architect shall be offences under the provisions of this Act and, if found guilty by the Supreme Court of having committed or engaged in any one or more of such acts or practices, such architect shall be liable to be suspended from practice for any period that may be decided on by the said Court or to have his name removed from the register as hereinafter provided: that is to say:—

- (a) allowing any person except a registered architect in partnership with himself to practise in his name as an architect;
- (b) directly or indirectly sharing his professional remuneration with any person not being a registered architect in partnership with him, or directly or indirectly accepting any share of the professional remuneration of such person or any commission or bonus thereon;
- (c) signing accounts, statements, reports, specifications, plans, bills of quantities, or other documents purporting to represent any architectural work performed by himself which work shall not have been performed under his personal supervision or direction;
- (d) directly or indirectly paying a person or persons a commission for bringing him work, giving any person or persons monetary or other consideration as a remuneration for bringing him work, or for inducing other persons to give him work.
 - (e) improperly obtaining or attempting to obtain work;
- (f) performing any architectural work in connection with any matter which is the subject of dispute or litigation upon condition that only in the event of the said dispute or litigation ending favourably for the party for whom the work is performed shall payment be made for such work;

- (g) conducting himself unprofessionally or dishonourable in connection with any work performed by him as an architect;
- (h) wilfully disobeying, refusing, or neglecting to carry out and perform any bye-law or order lawfully adopted and established by the Institute regarding any point of professional practice;
- (i) engaging in any practices or performing any acts similar to those acts and practices prohibited in the aforegoing sections.

If the conduct or behaviour of any member of the Institute shall appear to the Provisional Council or the Council to require investigation, they shall, before proceeding against such member in the Supreme or Provincial Court, as provided in the next succeeding section, hold an enquiry and, if required by such member, hear evidence on the matter. Fourteen days' written notice of the charges against him and of the date and place of such enquiry shall be given to the member concerned, who shall be entitled to appear at such enquiry to answer such charges and to produce evidence on his behalf, and his own evidence (if any) shall be admissible against him in any other proceedings, civil or criminal. If such member requires evidence to be heard the Provisional Council or Council may also hear evidence against such member. Where evidence is to be heard the President or Vice-President may administer the oath to witnesses and such witnesses shall be subject to the law relating to perjury.

In the event of any member of the Institute, being in the opinion of the Provisional Council or Council guilty of any act or omission prohibited by this Act, or offending against any bye-law framed thereunder, the Provisional Council or the Council may call upon such member to show cause to the Provincial Court of this Union why he should not be prohibited from practising as an architect, and why his name should not be removed from the register. All such proceedings shall be taken in the name of the Institute. Upon the hearing of any such matter the court may suspend such member from practice, remove his name from the register or make such other order as may seem fit and may further make such order as to costs as may seem fit. In case of such suspension or removal, copies of the order of Court shall be lodged with the Minister of the Interior and the Institute and noted in the register.

In case any member of the Institute shall in consequence of an order of Court be suspended from practising as an architect in this Union, such person shall, during such time as he is suspended, cease to be a member of the Institute, but shall nevertheless be liable to pay all moneys due by him up to the date of such suspension.

No claim against the assets of the Institute shall exist in the case of, or to be made by, any person whose name has ceased to appear upon the register of the Institute.

Every person whose name appears on the register shall be entitled to style himself Registered Architect, South Africa,

Architects' Registration in New South Wales.

The Bill introduced last June into the Legislative Assembly of New South Wales provides (*inter alia*) that any person who claims to be registered under this Act shall be so registered if such person—

- (a) holds some recognized certificate as hereinafter defined;
- (b) has attained the age of twenty-one years, and has for a period of two years before the commencement of this Act been bona-fide engaged in New South Wales in the practice of architecture, and who has made application for registration to the board within one year from the commencement of this Act; or
- (c) has attained the age of twenty-five years, and has been engaged during a period of not less than ten years in the acquirement of professional knowledge in architecture, and who has made application for registration to the board within one year from the commencement of this Act; or
- (d) has attained the age of twenty-five years, and has been engaged during a period of not less than ten years in the acquirement of professional knowledge in architecture, and has passed an examination before the board according to the prescribed regulations; or
- (e) has attained the age of twenty-one years, and shall have been a pupil or apprentice for a period of not less than four years to an architectural practitioner entitled to be registered under the Act, and had two years further experience to the satisfaction of the board according to the prescribed regulations:

Provided that no person shall be entitled to be registered until he proves to the satisfaction of the board that he is of good character.

RECOGNIZED CERTIFICATES OF ARCHITECTS.

The term "recognized certificate" means a certificate, diploma, membership, degree, license, letters, testimonial, or other title, status, or document granted by some university, college, or other public institution in a British possession or foreign country, and which is recognized by the board as entitling the holder thereof to practise architecture in such possession or country, and as furnishing sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of architecture.

REGISTER.

The registrar shall enter in a register in the prescribed manner and on payment of the prescribed fee, the full names and addresses, date and description of qualifications for which registration is granted, and all other prescribed particulars of all architects, and shall transmit in the month of January in each year a certified copy of such register to the Chief Secretary, who shall cause the same thereupon to be published in the Gazette. A copy of such Gazette shall be prima facie evidence in

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all legal proceedings that the persons mentioned therein are registered according to the provisions of this Act, and the omission of any name therefrom shall be prima facie evidence that such person is not registered.

UNREGISTERED PERSONS NOT TO ASSUME NAME OR PRACTISE.

From and after the no person, unless registered under this Act, shall—

- (a) take, use, or adopt the title or description of architect, either alone or in conjunction with any name, title, words, letters, additions or description implying or leading to the belief that he is qualified to practise as an architect, or is carrying on the practise of architecture:
 - (b) or practise as an architect for reward.

PENALTY.

Any person offending against this section shall be liable to a penalty not exceeding twenty pounds for every such offence, and to a further penalty of one pound for every day during which such offence is continued.

REGISTRATION OF NAME REMOVED.

Any architect who is aggrieved by any decision of the board suspending him from practice or removing his name from the register may appeal therefrom to the district court within six months after the notification of such decision to such architect. The board shall not suspend any architect, or remove any architect's name from the register without sending to such architect a statement in writing of the conduct imputed to him, and without affording him an opportunity of giving an explanation in writing or in person.

CERTIFICATES.

No certificate required by any Act now in force or that may hereafter be passed or that is required by custom from an architect shall be valid unless the person signing same be registered as an architect under this Act.

PENALTIES FOR FALSIFICATION OF REGISTER.

Any person who wilfully makes or causes to be made any false entry in or falsification of the register, and any person who wilfully procures or attempts to procure himself or any other person to be registered under this Act by making or producing or causing to be made or produced any false or fraudulent representations or declarations either verbally or in writing, and any person aiding or assisting therein shall be guilty of a misdemeanour, and shall on conviction be liable to be imprisoned with or without hard labour for any term not exceeding twelve months or to a penalty not exceeding twenty pounds.

Registration of Engineers, Architects and Surveyors.

Mr. P. C. Cowan (Chief Engineering Inspector of the Local Government Board for Ireland), who presided over the sitting of the Conference of Municipal Representatives, speaking at the Royal Sanitary Institute Congress at Belfast, dealt with the law in force in Ireland with regard to engineers and surveyors, and said in some respects it was more favourable than the law in England. The absence of provisions in the statutes to prevent incompetent persons from acting as engineers and architects was much to be regretted, and doubtless accounted for the low estimate often put on their services. It was a matter which could be more easily dealt with than the wider question of registration of engineers and architects, and the thin end of the wedge had been inserted by the provisions of the Labourers' Act of 1906, which laid down rules as to the persons who should be deemed eligible for employment as architect, engineer, or surveyor. He ventured to think that the time was now opportune for legislation which would protect engineers and architects from unfair competition, and the public from the very serious loss which now arose from their displacement by practitioners who were not qualified. There was now a sufficient supply of properly-trained men, and no good reason why the safeguards afforded to the practice of law and medicine should not be extended to those whose function was "the art of directing the great sources of power in Nature for the use and convenience of man." If the Institutions of Civil Engineers and the corresponding Architectural Associations and the Universities were to combine in a effort to secure proper recognition of the professions of engineering and architecture, success would ere long be obtained.

Referring to the recent Conference of Surveyors at Westminster, and the proposals forstandardizing an examination throughout the Empire, *The Builder* expresses the view that surveyors may fairly claim that, if the proposals of this Conference are adopted, they will be in the forefront of the professions in respect of statutory qualification, for with a qualification recognized throughout the British Dominions they become the peers of any other profession in this respect. We cannot fail to appreciate the fact that, as regards the purely scientific profession of surveyor, it is much easier to formulate a satisfactory test of competency than in the case of one involving the practice of an art, but at the same time the object-lesson is clear enough: if architects are to obtain official recognition as to their status, it is desirable that such recognition should extend to all English-speaking communities on a basis as uniform in its character as local circumstances will permit.

The Planning of Organ Chambers.

In an article on this subject published in the Building News, Mr. G. A. Audsley. LL.D., says there is, and justly so, as matters have stood, a great prejudice in the minds of musicians and organ-builders against the very name of organ-chamber; but this prejudice has been created by the mistakes of architects, and the miserable holes in the wall they have, in far too many instances, been pleased to construct for the reception of the organ in their churches. It must be acknowledged, however, that when anything approaching an important instrument is placed close to the choir-stalls in a church of the ordinary dimensions, it must of necessity occupy some place of the nature of a chamber. Let the organ-chamber, as it is commonly understood and constructed, be done away with in all possible cases; but when a chamber is imperative, let every care be taken to render it suitable for the reception of an organ of the requisite size. Should the architect not feel himself capable of deciding the size, proportions, and other important matters connected with the planning and construction of the chamber, he certainly should obtain expert advice on the same. The conditions to be observed in planning and constructing a satisfactory organ-chamber are as follows:

- (1) Sufficient floor-space must be provided to allow the organ to stand thereon without undue crowding of its parts, and with enough space behind it and at its sides to give free egress to the sounds of the pipe-work, and easy access to all parts of its mechanism.
- (2) Ample height must be provided for the organ to stand at the most favourable elevation, and yet leave sufficient space above its pipe-work for the free emission of the sounds therefrom.
- (3) Two arches or other openings (according to the architecture of the church) of the largest possible dimensions should be provided: the one toward the choir or chancel being carried up to the entire height of the ceiling of the chamber, so that no sound may be locked in above the organ. Whatever shape the upper part of this main opening may be, it is desirable that the ceiling of the chamber should follow it closely, and, if possible, at the same level. The second opening toward the body of the church should also be as wide and lofty as circumstances will permit
- (4) Every precaution must be taken to prevent damp and sudden changes of temperature within the chamber. The external walls should be built double, with an air cavity between. All the inclosing walls and the ceiling should be lined with narrow, grooved-and-tongued pitch-pine boards, tightly jointed, firmly nailed to battens so as to prevent vibration, and well varnished; or, what is not quite so desirable, they may be metal-lathed and hard-plastered, and finished with best enamel paint. Both treatments are cleanly, and favour reflection of sound.

- (5) A very firm and secure floor must be laid in the chamber; for the organ, with all its woodwork and many hundreds of metal pipes, is necessarily very heavy, and requires to be supported in the most rigid manner. The floor should in all cases be of wood, its boarding not being less than $1\frac{1}{2}$ in. thick, securely nailed to large and well-supported joists. Every precaution must be taken to prevent damp rising from the floor; and good ventilation must be provided to prevent dry-rot attacking the joists, etc.
- (6) As the organ is an instrument exceedingly sensitive to changes of temperature, every means should be adopted to prevent the external atmosphere from having direct action on its pipe-work. Windows in the walls directly adjoining the sound producing portions of the instrument are to be avoided, because they create local currents of cold air in winter and warm air in summer, which are almost certain to throw the susceptible pipe-work out of tune. Should the architect, probably for external appearance, deem it necessary to insert windows in undesirable positions, they should be boarded over on the inside, or furnished with an inner screen of thick glass.

There is no fixed rule for the position of the organ-chamber; but the northern side of the church is usually preferred, and, indeed, it is to be recommended on account of the constant shade on that side, which goes far to secure equality of temperature. When the chamber is on the southern side, it is subjected to the direct rays of the sun during the hottest hours of the day, and, accordingly, is liable, especially in summer and autumn, to become heated to an undesirable degree. When, however, the chamber has been constructed as directed above, and is covered with a wooden ceiling, kept some distance below the external roof, there is little objection to a southern aspect.

American Institute of Architects' Schedule of Charges.

The A.I.A. schedule differs in some respect from that sanctioned by the R.I.B.A., inasmuch as by the former the minimum charge for an architect's professional services, based upon the total cost of the work complete, is six per cent., a higher charge being indicated on alterations to existing buildings, on decorative and cabinet work, etc., and landscape architecture.

The architect is also entitled to compensation for articles purchased under his direction, even though not designed by him, and to a special fee for work conducted under separate contracts, rather than under a general contract.

He is also entitled to payment for changes in drawings, specifications or other documents required by the owner after a definite scheme has been approved, and the extra labour or expense incurred by the architect owing to the delinquency or insolvency of a contractor.

Payments to the architect are due as his work progresses in the following order: Upon completion of the preliminary studies, one-fifth of the entire fee; upon completion of specifications and general working drawings (exclusive of details), two-fifths additional, the remainder being due from time to time in proportion to the amount of service rendered. Until an actual estimate is received, charges are based upon the proposed cost of the work and payments received are on account of the entire fee.

In the case of the abandonment or suspension of the work, the fee for preliminary studies is in accordance with the character and magnitude of the work; for preliminary studies, specifications and general working drawings (exclusive of details), three-fifths of the fee for complete services.

The supervision of an architect (as distinguished from the continuous personal superintendence which may be secured by the employment of a clerk of the works or superintendent of construction) is defined as such inspection by the architect or his deputy, of work in studios and shops or a building or other work in process of erection, completion or alteration, as he finds necessary to ascertain whether it is being executed in general conformity with his drawings and specifications or directions. He has authority to reject any part of the work which does not so conform and to order its removal and reconstruction. He has authority to act in emergencies that may arise in the course of construction, to order necessary charges, and to define the intent and meaning of the drawings and specifications. On operations where a clerk of the works or superintendent of construction is required, the architect shall employ such assistance at the owner's expense.

Drawings and specifications, as instruments of service, are declared to be the property of the architect.

Ninth International Congress of Architects.

This Congress is to be held in Rome from the 2nd to the 10th of next October. H.M. the King of Italy has graciously accepted the patronage of this Congress, and the Ministers of Foreign Affairs, of Public Instruction and of Art have kindly consented to act as honorary presidents.

By kind permission of the Syndic of Rome the Congress will be inaugurated in the historic Hall of the Horatii and Curiatii. The following are some of the subjects which will be considered:—

- (1) Reinforced concrete, the mode of using it in different countries, and how it may be applied to great buildings both as regards the technical and the decorative point of view.
 - (2) Duties and rights of the architect with regard to his employer,
- (3) The technical and artistic education of the architect, and the *Architects' diploma*. The exercise of his profession beyond the limits of his own country.
 - (4) Considerations as to modern architecture.
- (5) The carrying out of architectural works for the State or other public bodies.
 - (6) The desirability of a dictionary of comparative architectural terminology.
- (7) Foreign academies in Rome. (History.—Course of study and works of the pupils. Their influence in their respective countries).

ITINERARY AND COST.

FRIDAY, SEPTEMBER 29th. Leave London (Charing Cross Station), 9 · a.m., by the short sea route Dover and Calais for Paris, continuing by evening express for Genoa, which will be reached on Saturday.

SUNDAY, OCTOBER 1st. Leave Genoa by morning express for Rome, arriving the same evening.

Monday, October 2nd, to Wednesday, October 11th. In Rome. Members will be able to return to London at their own leisure, within the validity of the tickets, *i.e.*, 25 days.

The cost including Second-class Travel Ticket, with First-class on Steamer from London, via Calais, Paris, and Modane to Rome and back, comfortable Hotel accommodation, from luncheon on September 29th until breakfast on October 11th, Omnibus Transfers between Station and Hotel on arrival and departure at Genoa and Rome, fees to hotel servants, railway porters, and the drivers of the conveyances utilized from London until breakfast in Rome on October 11th, free conveyance of 56 lb. of Baggage (while travelling with the Courier); will be from £14 14s. per head according to class.

All communications and inquiries should be addressed to Mr. John W. Simpson, v.-P., R.I.B.A., at 3, Verulam Buildings, Gray's Inn, London, W.

Mainly about Members.

In the Bradford Royal Infirmary Competition the design by Messrs. A. Marshall, Percy D. Prior (member) and W. A. Smith was placed third.

The board of guardians have decided to have a home erected for the nurses at the workhouse infirmary, Dearnley, Rochdale. Accommodation will be provided for 41 persons. It will be a three-storey building. The external walls will be faced with local bricks with York stone dressings, and the roofs will be covered with blue Welsh slates with overhanging eaves. The total cost, including furnishing, will be £5,500. Mr. Herbert Clough, of Butts Avenue, Rochdale, is the architect.

The Council of the South African School of Mines and Technology having been approached by the Association of Transvaal Architects, arrangements have been made to conduct the qualifying examinations for registration under the Architects' Private Act (Transvaal) 1909. Mr. S. C. Dowsett is the lecturer in "Building Construction and Drawing, Stage I.," and Mr. E. H. Waugh, the Society's local Hon. Secretary, is the lecturer in "Sanitation," and lectures and classes are being organized in the necessary subjects.

At a recent meeting the Bishop of Galway announced that the new Diocesan College was nearing completion. Over £8,000 had already been expended upon it, and when finished, some £14,000 surplus would be available for the erection of the new cathedral. The design of the cathedral would be entrusted to the architect of the College, Mr. W. A. Scott, A.R.I.B.A., and it was mentioned that a committee of experts had been appointed to advise. It is expected that £70,000 or £80,000 will be expended upon the new cathedral.

"Hunningtons," The Goffs, Eastbourne, lately in course of erection for Mr. F. H. Stapley, has commanding views of the Sussex downs, and overlooks the Gildredge Park. A full-size billiard-room and additional bedrooms are provided on the second floor. The external brickwork has been faced with purple stocks, relieved with tile-creased quoins. The roofs are covered with red hand-made tiles from the Keymer Brick Company. The work is being carried out from the designs and under the supervision of Mr. Peter D. Stonham, architect, Eastbourne.

A course of evening lectures and classes has been arranged by the Public Works Department at Pretoria with a view principally to assist the junior members of the staff of the department in the study of architecture and allied subjects. Members of the staff and other gentlemen have kindly promised to give their services as lecturers or otherwise assist in conducting the lectures and classes, which will be held twice weekly in one of the large offices in the P.W.D. The lecturer of "Design" is Mr. R. Howden, a Past President of the Johannesburg Branch of The Society of Architects.

Mainly about Members.

The parish church of Charles, Plymouth, has been re-opened after having been altered, cleaned, and decorated. The alterations consist of the raising of the chancel floor, the bringing forward of chancel seats to provide more room in the sanctuary, and making them suitable for choir-stalls; also the provision of new oak clergy stalls on either side; the forming of return ways to side aisles; the building of an entrance to the vestry from chancel, and making an entrance from the north aisle. A design has been approved for a carved oak reredos. The alterations have been carried out under the supervision of Mr. M. Alton Bazeley, architect, of Plymouth.

The new automatic water supply to the works of the Columbia Phonograph Company, Ltd., Bendon Valley, Wandsworth, from the River Wandle, was put into operation towards the end of June. The water, after filtration, runs by gravitation to a well in the works, and is then lifted by a direct-acting pump, circulated round the casings of a large number of hot presses, and delivered into a cooling-tank, from whence it is returned to the river without loss. The supply is automatically controlled by the requirements. The new plant has effected an immediate economy in the working expenses equivalent to a saving of from £400 to £500 a year. The works were designed by Henry Adams & Son, M.M.I.MECH.E., 60, Queen Victoria Street, London, E.C., and were carried out by direct labour under their supervision.

A new church of St. Paul, Weston-super-Mare, is in course of erection in lieu of a temporary building, from plans by Mr. G. P. Fry, of Weston-super-Mare. It is in the Late Gothic style, consisting of a nave, north and south aisles, and tower. Externally the roof will be slated, the aisles, chapel, vestries, and organ-loft will have flat roofs covered with asphalt. The church will be an arcaded edifice with five main bays in the nave, and two two-light clerestory windows above each bay; the aisles will be lighted with three-light tracery windows. Provision is made for a tower which will rise over a portion of the side-chapel. The nave will provide for 500 worshippers, the aisles for 350, and the chapel for 40, while provision is made for clergy and choir to the extent of 50. The outlay will be £8,000.

A London member of The Society of Architects desires to amalgamate his practice with that of another member, (forming a partnership) and is prepared to offer a substantial consideration for a half-share or junior partnership. Enquiries should be addressed to the Secretary.

Meetings and Fixtures.

- Sept. 7th. Committee and Council Meetings. House List, etc.
 - ,, 14th. Entries for Examination close.
 - ,, 30th. Last day for submitting measured drawings for the Architectural Scholarship.
- Oct. 1st. Travelling Studentship Tour results to be submitted.
 - ,, ,, Last day for receiving nominations for Officers and Council.
 - ,, 3rd, 4th, and 5th. Examinations for Membership, London, Manchester, Leeds, Cardiff and Oxford
 - ., 5th. Committee and Council Meetings.
 - " 19th. Committee and Council Meetings, followed by Annual General Meeting.

Architectural Scholarship, 1911.

The attention of Students qualified for this Competition is drawn to the regulations, which provide that the measured drawings, etc., must be delivered, carriage paid, at the Society's Offices, 28, Bedford Square, W.C., not later than Saturday, September 30th, together with the original sketches and notes.

The Drawings must be without name, motto or other mark of identification, and must have attached thereto a plain sealed envelope containing the Competitor's signature and address, appended to a declaration that the Drawings, etc., are the Candidate's unaided work.

The Drawings need not be mounted, but they must be delivered flat and not rolled.

Annual General Meeting.

The Twenty-seventh Annual General Meeting of The Society of Architects will be held at 28, Bedford Square, London, W.C., on Thursday, October 19th, 1911, at 8 p.m.

Agenda:-

- 1. The President to take the chair.
- 2. Minutes of the last Annual General Meeting, and of the Special General Meeting held on May 11th.
- 3. Nominations and Announcements.
- 4. Ballot for candidates for Membership.
- 5. Council's Annual Report.
- 6. Election of Officers and Council, 1911-12.
- 7. Votes of thanks.

Light refreshments will be served after the meeting.

Journal

The Society of Architects

Including Transactions and Architectural Notes.

No. 48. Vol. IV.1

OCTOBER, 1911.

[New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Polytechnic (Regent Street) School of Architecture.

The Polytechnic has been re-built during the past twelve months, at a cost of £90,000, of which £50,000 has been contributed (including a special gift of £30,000 by Lord Leith of Fyvie), as a memorial to King Edward VII.

The new extension has enabled the Governors to provide adequate accommodation for the many branches of the work. Excellent newly equipped workshops, laboratories, studios and class-rooms have been provided, and the lighting, heating and ventilation throughout are of the latest type.

The Day Department is under the control of Mr. G. A. Mitchell, A.R.I.B.A., who was appointed by the Governors of the Institute as architect for the re-building scheme. This day school is suitable for those intending to enter builders' and contractors' offices and works, or who wish to follow any of the many designing and constructive industries.

The Evening Department is intended for those preparing for the various professional examinations, also for the craftsman in the various building trades. Mr. Charles Mitchell, M.S.A. is the headmaster, and he personally supervises the course of instruction arranged for each student.

To prevent loss of instruction to any who may be unavoidably compelled to be absent from the Classes, arrangements have been made this Session whereby the are strongly advised to attend the Tutorial Classes held every Thursday evening, in ·connection with the regular instruction.

The object of these Tutorial Classes is to assist students in keeping up with the regular work of the Session, and in overcoming any special individual difficulties.

Twelve Years' Work in the Roman Forum.

The *Times* Correspondent in an article appearing in that paper on September 6th and 7th, pays a tribute to the work accomplished by Commendatore Boni, both as an excavator and a curator, and gives some indication of the chief features likely to appear in the report which he is to present in his capacity of President of the Topograpical Section of the International Archæological Congress, to be held next year in Rome.

The seventh and last report upon the archaic *sepulcretum*, says the writer, deals with the question of the extent of the *sepulcretum*, first discovered in 1902, which lies in the area between the Temple of Antoninus and Faustina, the Via Sacra, and the Carcer. That it goes under the foundations of the Temple of Antoninus and Faustina is fairly certain. But only when the superficial excavation of the Basilica Æmilia is finished will it be possible to ascertain if it can be found on the further side of the watercourse which once divided the valley of the Forum, forming in the earliest days a boundary between the Sabines and the Latins.

The remains of masonry intersected by the foundations of the Arch of Titus are now identified with the foundations of the Temple of Jupiter Stator. They consist of great blocks of squared tufa, on which are cut large $sigl\alpha$, or dual letters. Buried under walls of the Imperial epoch were found the remains of a small building, a vestibule with two lateral $cell\alpha$, built of blocks of tufa and decorated on the outside with pilasters of travertine. This, it is conjectured, may have been the Sacrarium of the public Lares, restored by Augustus.

The great walls of the Imperial period, which covered this Sacrarium, descend in two parallel lines from the Porta Mugonia. On their outer side, facing the Arch of Titus, there are rectangular projections that look like towers, and behind these towers, on the inside, a corridor. The two walls reach the Via Sacra, which they encroach upon, and then turning at a right angle may be traced as far as the House of the Vestals. It is evident that they enclosed a very considerable area, within which were the *horrea*, or granaries, as well as the House of the Vestals, and that they were fortified against attack from without. The conjecture is that they were erected in the course of the third century, probably by Aurelian's orders.

The report amplifies the argument by which it is sought to establish the identity of certain remains in the centre of the Forum with the Tribunal of Trajan.

The site of the tribunal, according to Commendatore Boni, would be a little in front of the Basilica Julia, on some spot facing the Basilica Æmilia, on the eastern side of the place where the statue of Marsyas and the traditional fig-tree once stood. Here excavations were made, uncovering, as is known, the base of the huge equestrian statue of Domitian and also a trapezodial enclosure paved with tufa, with the remains of a large altar at the eastern end and four small square altars at the west, which

was at once identified as the Lacus Curtius. But between these two monuments were discovered the remains of a later structure, which Commendatore Boni believes to have been the Tribunal of Trajan.

The most extensive of the more recent excavations have been those carried out on the site of the Basilica Æmilia, between the Temple of Antoninus and Faustina and the Curia.

These excavations have revealed the actual base of the portico, which ran parallel with the Via Sacra, and a large portion of the great central nave behind it. The portico had fifteen arches upon the ground floor, in front of which stood a line of fourteen tabernæ, divided from each other by walls which corresponded with the pilasters of the arched portico behind. The whole line of tabernæ formed a kind of projecting ground floor to the main building, and, to judge from such of these marble pavements as survive, they were as richly decorated. Full and complete excavation has been rendered impossible by the enormous mass of ruined material which lay upon the pavement. Future excavation may perhaps reveal the cause of this catastrophe. Meanwhile it is reasonable to conjecture that the Basilica succumbed to one of the violent earthquakes which destroyed so many great buildings in Rome in the first half of the sixth century. But the important point to note is this—that the rebuilders of the sixth century restored only the tabernæ with their back wall and the portico supporting it.

However, enough will probably be found to assist in forming a tolerably complete idea of the original building. As far as can be seen at present, the whole area was divided into three naves by two lines of very large columns of African breccia surmounted by Corinthian capitals. These columns supported richly carved cross-beams, above which rose another line of slighter columns, which in their turn supported the cornice and coffered ceiling.

Commendatore Boni's report also deals with the famous Niger Lapis and explains his theory of its origin. The black stone was a pavement laid to mark the site of some ruined sanctuary. It seems generally accepted that it was the black stone in the Comitium which, according to Pompeius Festus, marked an unlucky spot—the grave of Romulus, or of his foster-father Faustulus, or of Hostus Hostilius, according to various traditions.

Commendatore Boni believes that the black stone marked an unlucky spot in the Comitium, and that the remains below it were those of the rostra destroyed by the patricians during the beginning of the Civil War, about 124 B.C., in the course of the conflicts which were marked by the murders of Tiberius and Caius Gracchus, tribunes of the plebs, and the massacre of many thousand citizens.

The Cause and Development of Dry Rot.

Mr. James Scott in an article appearing in *The Surveyor and County Engineer*, gives the result of his microscopical examination into the cause of Dry Rot, and shows that it is not in the first instance due to dampness, but to a germ.

Although there are more than one species of dry rot, says Mr. Scott, one is so common that it is generally meant when dry rot is referred to. This is known as *merulius lachrymans*. The malady does not originate in the growing trees, but in the cut wood, and may be found in stacks, where it can exist undetected. As a rule, its occurrence depends on the fact that badly-seasoned timber is laid in places where there is a lack of ventilation and stagnant moisture. Like infectious diseases among men, it must start by inoculation of the germs, which will not act in well-guarded environments.

The disease begins with spores which are individually invisible, and in the mass resemble a quantity of very fine dust of a yellowish-brown hue. Each spore germinates almost at once, by protruding a portion of itself from one or more spots. These tiny projections continue to lengthen, and then to branch off in various directions.

All these threads are hollow, and frequently segmented. Owing to the disturbance of the equilibrium of the various elements of the wood, a decomposition sets in, and this proceeds, with increasing effects, throughout the remainder of the fungus's life. When the spores have branched and rebranched as much as possible there exists a thin sheet of fine filamentous matting of a greyish white tint.

As fast as the matting—which is called a *mycelium*—spreads, the material on which it is preying falls asunder, though it may seem to be held in place—a phase due to the retentive power of the *mycelium*.

Eventually a small hollow space is eaten out by the fungus, a large amount of the destroyed wood having been vaporised to permit this shrinkage to occur. Then the parasite begins to fruit, as it is called. Certain of the threads send up erect extensions—known as basidia—which swell at their summits, where four sloping points develop. These points are termed sterigmata, and on each one there appears a tiny bladder, as it were, that matures and becomes a spore of the kind that commenced the cycle of events.

The spores are, at regular periods, discharged off by the sudden contraction of the basidia and simultaneous twisting of the sterigmata. As the spores are ejected it follows that the disease is extended in every direction. The new spores, which thus find themselves widely separated (in a comparative sense), link themselves up in the manner described by branching and interlacing, thereby increasing the diameter of the mycelium, which consequently affects a wider range of wood. All round the

The Journal of The Society of Architects.

The Cause and Development of Dry Rot.

additional mycelium other tufts of basidia grow, and these act in the same way as their forerunners. The weight of the wood increases.

The threads of the maturing fungus go deeper down in the wood, and produce meantime a kind of spongy-cakiness in it. During the progress of the disease globules of moisture resembling tears are distilled from the wood; hence its specific name lachrymans. It seems that ammonia is necessary for the propagation of the fungus. When it has absorbed as much nutriment as possible its growth ceases, and it remains as a mass of spores among the powdered wood it has occasioned. It usually stops short near the surface. It is thought that the air surrounding the timber stops it from penetrating to the outer space, since free ventilation generally suppresses it when it is discovered and treated in its earlier stages.

Just as there are seasons connected with the higher plants in which growth alternately ceases and is accelerated, so with these tiny objects there are periods of fluctuation in vigour, though the intervening times are, of course, short, and may be either hours or days. Corresponding with these variations there can be detected a modification in the affected material, which presents a minutely honeycombed appearance.

Spores grow with equal facility in any position. Some *basidia* (spore-carriers) may be inverted, and yet perform their objectionable functions satisfactorily for the fungus.

Attacked timber often contains as much as 50 per cent. water by weight, besides nitrogenous and fatty substances, and detached cellulose from the destroyed cells. There are also discoverable small quantities of potash, phosphorus, and other organic salts and bases.

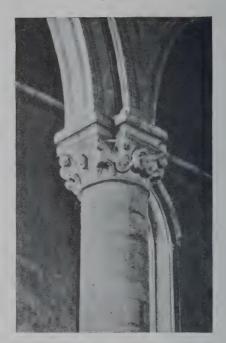
One of the most prominent of its effects is the destruction of coniferin in pine and fir timbers. Coniferin is a substance which splits up into glucose and coniferyl alcohol by means of acids, the coniferyl alcohol then being capable of oxidising, through the action of the ferment oxydase, into vanillin, the aromatic essence of vanilla. Vanillin is also procurable from the vanilla bean, which exhibits nothing of the kind while growing, but depends on decomposition for the development of the essence. By synthetic methods vanillin can be procured from oil of cloves, etc.

As the fungus cannot assimilate inorganic salts or substances, its destruction is generally sought by introducing strong minerals into the wood. It is always best, however, to excavate the attacked portions and give the remainder a thorough soaking with hot creosote, if possible. Painting timber, or even superficially coating it with creosote, merely closes up the pores of the wood. If dry rot has started it will proceed apace inside, and leave the customary shell.





EARLY ENGLISH PORCH.



TRANSITIONAL NORMAN CAPITAL IN NORTH NAVE ARCADE.



SAXON DOORWAY IN TOWER.

(Photographs by Henry Walker.)

DETAILS FROM BARNACK CHURCH (NORTHANTS.)

Barnack Church.

The church of St. John the Baptist, at Barnack in Northamptonshire, is one of the oldest and most interesting churches in this country, and presents an ideal object lesson for the student of ecclesiastical architecture. The building contains examples of every style of architecture from the early Saxon to late Perpendicular, and illustrates in an admirable way the blending of the various styles. The church is built of Barnack rag which was formerly quarried on the outskirts of the village, and used for the building of monasteries and churches in different parts of the country. The quarries have not been worked since the latter part of the 18th century, the beds of oolite, having been exhausted by the great demands made upon them.

The tower of Barnack church is the most interesting feature of the edifice. It is reputed to date back to the 7th century, and according to Mr. Parker may be regarded as "the oldest church in England." It is believed to be the work of Wilfrith, Bishop of Leicester; in the days when Wulfere was king of Mercia. In an admirable paper read before the Architectural Society of Lincolnshire and Nottinghamshire, in 1895, the Rev. H. S. Syers, M.A., then Rector of Barnack, said "The arguments connecting it with Wilfrith are these: (1) the sundial, linking it with a similar dial of a church known to be Wilfrith's at Warnford in Hampshire, and with the church at Corhampton, in the same county, which again connects with St. Mary's Bishophill Junior at York, believed to be Wilfrid's restoration, where he imitated his friend Benedict Biscop's work at Monkwearmouth. There Bede tells us, Benedict introduced glass (vitrum) for which he brought artificers from the continent. There are preparations for glass at Barnack. (2) The Barnack style of architecture, especially the panels of scroll work with birds and the interlacing tracery in upper windows resembling Wilfrith's Northumbrian churches. (3) If the three emblematic birds represent a threefold dedication of the church to St. Peter, St. John the Divine, and St. John the Baptist, then the first follows one of Wilfrith's usual dedications to St. Peter."

The tower of the church is surmounted by an Early English spire, and here it may be noted that Sir Gilbert Scott was of opinion that Mercia, the district in which Barnack is situate, was the parent of the "Tower Roof," as he designated the spire. Each side of the tower is divided into panels by vertical stone pilasters, and the angles exhibit "long and short work" very distinctly. There are thirteen windows in the tower, five of which are blocked up. All of these are worthy of the closest study. Other notable features of the exterior of the tower are short columns on the south, west and north faces. These are beautifully carved in low relief, with the emblematic vine, surmounted by the cock, the eagle and the dove. Below on the south side is the sundial already referred to. The window below the dial is enriched with birds carved in low relief. Below the lower cornice of the tower are stone piers

intended to support the Saxon nave, the latter being about 32 ft. in height and 33 ft. in width; a little wider than the present nave arcades. The south entrance door in the tower is remarkable and of very rude and singular construction, with special drip blocks to the label terminals. In its construction this doorway is similar to the internal tower arch. The imposts of this arch, with undeniable evidence of the "search" for an abacus are very remarkable, and should be closely studied by the architectural student. The main entrance to the church is through a beautiful, high-pitched, Early English porch, with elegant arcading and groined roof. The chief feature of interest in the interior is the tower arch. Up to 1855, this archway was blocked up with stonework, in which was an Early English doorway, now the entrance to the Rectory garden. Considerable difference of opinion exists as to the former use of the lower part of the interior of the tower; with its stone seats and sedilia. Dean Argles was of opinion, that it was used as a Court of Justice; Mr. Parker suggested that it was used as a school, whilst others have thought that the altar of the church was placed within the tower in Saxon times. Two rude aumbries still exist in the tower walls, and this fact would appear to warrant the latter supposition.

Passing now to the Norman work in the north arcade of the church, we find it has a strong resemblance to Continental work. The tile form of abacus, and the classical nature of the carving, are noticeable in this respect, and are quite late, or transitional Norman. The Early English work comprises the fine south arcade, the beautiful 13th century font, the entrance porch, the spire, and the supporting arches and vaulting inside the tower. The mixture of rounded and pointed arches, and the round and square abacus are noteworthy and mark the transitional character of the work.

The portions in the Decorated style include the tracery of the aisle windows, the north geometrical and the south curvilinear, with a good example of the ball flower moulding on the exterior of the south aisle. The choir is large and spacious, its main features being of the Decorated period. The east window is exceptionally fine and the piscina and sedilia are also admirable.

The Lady Chapel, eastward of the south aisle, is of the Perpendicular period, the exterior especially being excellent in design and workmanship. In the east wall (interior), are two canopies, one of which contained a figure of the Virgin Mary and Child, with the Dragon beneath (now destroyed), and the other a most remarkable and probably unique sculpture illustrating the Holy Conception. There are several tombs inside the church worthy the attention of the student.

It is interesting to note that Charles Kingsley's father was Rector at Barnack, and that Charles Kingsley spent his early days there. The Rectory is a beautiful building with portions of 13th century date, and the visitor will be well-advised to seek permission to inspect the exterior before leaving the village.

HENRY WALKER.

Architecture and Official Recognition.

The Architectural Copyright Bill ensures that architecture will receive official recognition among the arts, and to most architects this is a sufficient reason for supporting a Bill which really involves much more than appears on the surface.

Official recognition of architecture, as here proposed, will mean official government of the affairs of the architect in the practice of his art, an extraneous management of specialists' work which is already governed by the canons of art and the laws of Nature, the only laws to which architectural art can be subject.

This means official interference with architectural art; the Bill asks for it and provides for it, and the architectural executive has, in the most thorough manner, provided for the permanence of this interference. In legislation which is the outcome of an international agreement "'Tis easier to undertake than to retract," and a well-nigh unalterable establishment of outside control of purely professional and artistic matters is being initiated. The architectural profession is, by its own choice, being superseded in its control of its own most intimate and private affairs by the legal profession whose qualifications for the control of artistic development can hardly be put forward in the name of architectural art. In other words, the architectural profession, in the opinion of the promoters of the Bill, is neither qualified for, nor capable of, looking after its own natural functions, and further the proposals for the Statutory Registration of Architects shows that the profession does not consider itself competent to govern the practice of the art which its members profess.

The official recognition which is held forth as the value to be gained from the copyright legislation is really the value to be obtained from the sale of the copyright of any building, the design of which has a copyright value; and the official interference with the development of architectural art is the unnatural impetus which will be given to the desire for novelty in design as the only method of creating copyright value.

The best interests of art cannot be served by legislation such as this. Artistic development cannot assimilate such official recognition; and the whole proposal, however much it may recommend itself to lovers of copyright value in cash, is obviously not founded on the best architectural philosophy or policy.

Official recognition has in the past done much for architectural art in this country; but it was true recognition, the recognition of personal worth, which encouraged and gave opportunities and rewards to Inigo Jones, Sir Christopher Wren, Sir John Vanbrugh, and Sir William Chambers, whereas, the present proposal clumsily rewards the man of ability and initiative, and penalises our art by forcing men of little talent to ape their betters in striving after copyright value without being able to take inspiration from others.

The artistic barometer is going from fair to stormy, and the transition of style from indifferent to bad will soon begin.

It is suggested that architects will specify whether copyright is to be reserved or not; but when penalties are to be enforced for infringement of copyright, it is but fair to suggest that every work the copyright of which is reserved should be registered, and illustrations of all copyright work made accessible to all. Official recognition in art entails official interference; and the latter can only be justified if the circumstances are clearly defined. Is it proposed to publish, clearly, definitely, and periodically, illustrations of all work which is to be copyrighted, or which is capable of being copyrighted? If so, this list of works must be subject to the decision of a court of law; and if the value in architectural copyright is to be classed with the value embodied in patent rights the administration of the law affecting these values should be similar. If the patent law is just, this proposed legislation is unjust. The officials of the Patent Office carefully tabulate and register all patents, and have power to settle disputed points. They are qualified specialists dealing with special circumstances.

The Register of Patents, with illustrations and full details, is open to all, in the interests of the patentee, and the would-be patentee. Their interests are safeguarded; the circumstances are clearly defined, and although, on referring to this Register, the would-be inventor often has his hopes of attaining to originality deferred, he is saved the pain and expense of unconsciously becoming subject to the penalties of the law.

Architects of their own free will, suggest legislation for the protection of copyright and have no proposal to make for businesslike administration of the law.

No records are suggested; no register is proposed; the architect is to specify whether copyright is reserved or not; and, in the event of trouble arising, legal aid is to be sought to reduce chaos to order! Specialists in art are to call in specialists in law to settle the subtlest points of art, although modern law has not the remotest connection or sympathy with modern art. Barristers who have made a *hobby* of art will specialize in copyright, and judges who have specialized in divorce will be qualified to adjudicate on architectural copyright.

The interests of the would-be patentee are safe-guarded by the patent laws and their administration. The would-be designer in architecture will be held to know of the existence of a law, but of no way in which he can be sure of keeping outside its powers of restraining him in his work, and what the latter will be like under these circumstances time only can reveal.

The whole policy appears to be wrong in principle. Our architecture, so far as it has developed, has done so in spite of the existing antagonistic forces of commercialism and apathy; and the introduction of copyright, as now proposed, will inevitably and detrimentally affect the work of the rank and file of architectural designers, who, although not qualified to lead, have yet been sufficiently discerning to follow in the footsteps of better qualified designers.

H. Guicharde Todd, f.s.a. (Scot.).

Royal Sanitary Institute Congress, Belfast.

The subjects discussed at the Congress covered a wide range, and some of those dealt with in Section II. (Engineering and Architecture) being of special interest to architects, we publish abstracts of the more important papers. The Society was officially represented at the Congress by Mr. Anthony Scott, of Dublin, and Mr. Godfrey Ferguson, J.P., of Belfast.

Town Planning of a Modern City from an Engineer's Point of View. Extent of Scheme.

Mr. C. Brownridge, M.INST.C.E., the Borough Surveyor of Birkenhead, says with regard to the extent of a district for which a town plan should be prepared, various suggestions have been made to the effect that probable development for twenty to thirty years should be provided for, but naturally this will greatly depend on local conditions. Whatever the extent decided upon, the scheme should be so designed and arranged as to form part of a scheme of practically illimitable extent, in order that if a further belt of land has at a later date to be planned, this additional area will work in and adapt itself to the portion already executed. Some authorities advocate the preparation of a plan for the complete laying out or development of an area including not only the main and secondary roads, but the detailed planning of all the land included in the scheme; whilst others (amongst whom is the writer) prefer that the scheme should provide for the laying out or planning of the main lines of communication, both direct and transverse, leaving the detailed filling in or development of the land between to be carried out by private enterprise. This latter method will be the one most generally adopted, as it would not appear fair to bind the landowner (possibly some considerable time before he is prepared to develop his estate for building purposes) to a specific detailed scheme. This arrangement would also leave some scope for the initiative of the architect and surveyor to whose domain this work properly belongs, and possibly prevent a monotony of type in estate planning. The local authority should, however, take powers to have full and effective control to ensure that the arrangements suitably conform to the general scheme, and that the means of intercommunication are satisfactory and ample.

In preparing the scheme it would be advisable to be ambitious and look well ahead, keeping in mind the fact that "construction" is more satisfactory and cheaper in the end than "reconstruction," and all the advice and assistance possible should be obtained from those capable of rendering it, in order that the scheme, when completed, may be the best that can be devised, both from a practical and artistic standpoint, and it should take into account all means of transportation both by land and water, utilisation of water frontages, etc., and the allocation of land for recreation grounds, playgrounds, parks, sites for schools, baths, allotments, etc.

Adequate means of access to railway stations should be provided, and railway companies might also be urged to pay some little attention to beautifying their stations and approaches in industrial areas similar to that frequently adopted with success at a number of suburban stations. The desirability of providing additional station facilities for suburban traffic must be borne in mind, and if distributing centres for goods were opened in conjunction with certain of these suburban stations it would materially reduce traffic congestion in the central area.

For the purpose of preserving records for future reference, photographs should be taken of old houses, old lanes, or characteristic features which will be transformed or altered by the scheme.

ROADS

It might be advisable in certain instances, in order to obtain a more direct route or avoid acquisition of expensive property, to design entirely new roads. In this case regard should be had to sewers, mains, and cables if it is proposed to entirely supersede the old road, and it would be desirable that certain of the roads be of extra width (say not less than 150 feet wide) arranged as promenade as well as traffic streets.

The provision of good wide boulevard or promenade streets furnishes facilities for recreation and exercise, and meets the requirements of a class who do not frequent public parks; and it would no doubt to a certain extent relieve the latter and make them available to their full extent for playing and recreation grounds, and enable them to be utilized as such rather than have them as extensively-planted and expensively-maintained ornamental parks.

Certain main roads should be multiple track roads in order to provide facilities for slow and fast traffic, and in certain cases special routes for tramways provided, so that the track might be laid without the expensive underbed and paving necessary when laid in the carriage-way, but it is possible that the trackless tramway system may in future be adopted on many routes. The intersection of main roads should be arranged and planned to facilitate traffic, and any natural or artistic feature incorporated in the scheme.

The distance apart of main arterial and transverse roads will depend on local conditions, but should not in any case exceed one mile.

It is possible that aviators may shortly be demanding special spaces or gliding ways to start on and land from their aerial flights; but until aerial navigation has made further headway, and the requirements of aviators better known, it will not be possible to satisfactorily provide for this contingency.

At a recent town planning conference, held under the auspices of the National Housing and Town Planning Council, it was decided as advisable to ask for main arterial roads to be 80 ft. wide, and that the road works on 50 ft. of this width to be made at the expense of the owners. It was further suggested that in secondary roads

a width of not less than 50 ft. should be provided between buildings. These widths, however, would in special cases be materially increased, and it is possible that the financial terms outlined in these recommendations may not be obtained; but as we are advised that local authorities should endeavour to secure definite agreements with any person who may be affected by the proposals, the recommendations referred to could form a basis of negotiation with the owners.

It is interesting to note that in many of the garden villages where kerbs and impervious surfaces to the footpaths were not laid in the first instance, these have since in many of the streets had to be provided owing to experience demonstrating their necessity.

It is also advocated that non-traffic streets of narrow width and short cul-de-sacs might be constructed. In considering this question, it should not be forgotten that districts which are of a rural or semi-rural character at the present time, will in a few years become urban; and all roads should be carefully designed, having regard to this fact, and to the adequate police supervision and lighting.

By-LAWS

Building by-laws and their operation are closely associated with the administration of the Act, and it is to be regretted that by-laws are not more elastic in their interpretations. And it would be advisable on public grounds if building by-laws could be simplified and revised so as to operate more stringently against the jerry builder, and give some little advantage to the conscientious and sound builder.

Some standard generally applicable to districts should be introduced, in order to remove some of the anomalies now existing; buildings on the immediate outskirts of urban districts in many instances being erected under more lax by-laws and requirements than apply to those erected within the urban area. If by-laws are too stringent they should be modified, if too lax they should be strengthened; but so far as they apply to quality of construction they should be uniform.

RESTRICTIONS, NUMBER OF HOUSES PER ACRE, ETC.

The limitation of areas for special purposes, the restrictions to be placed upon the land as to the number of houses per acre to be erected, the defining of shop or trading areas, as well as areas upon which the erection of factories, warehouses, or workshops are to be permitted, are matters calling for careful thought and consideration.

The limiting of shops to certain centres and certain streets would materially add to the brightness of shopping centres, and it would appear advisable to rather limit specific areas for the erection of dwelling-houses than allocate specific areas for the erection solely of manufactories and workshops; otherwise it might possibly prevent an enterprising manufacturer erecting in the immediate vicinity of his works suitable dwellings for his workpeople.

The Journal of The Society of Architects.

Deciding the number of houses to be erected per acre, and possibly the number of storeys or height of buildings, are questions calling for much thought and consideration. If the number is unduly restricted, it might possibly limit the erection of self-contained houses, and encourage the erection of tenement houses with all their disadvantages; and it is advisable that this subject should be dealt with in a fair-minded and liberal spirit, keeping in mind the fact that land on the immediate outskirts of our industrial areas frequently changes hands at a price bordering upon £1,000 per acre before a street is laid out.

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If not more than twenty houses per acre were permitted this would give approximately one hundred persons per acre and be reasonable for suburban districts; while the number per acre in the more rural districts might possibly be further reduced to ensure adequate allocation of land for the purpose of open spaces, playing grounds, allotments, etc.

It is frequently advocated that every house should be provided with a large garden. Until it is assured that all occupiers are prepared to properly utilise and keep in order such gardens, it will be preferable, while providing a number of houses with gardens attached, to erect property with gardens which are communally or publicly maintained.

In most of the garden suburbs considerable power appears to be retained by the authorities under whose direction the areas have been developed, in regard to the utilisation and mainterance of the gardens and open spaces.

RE-DEVELOPMENT.

The question of re-development is an important one, and gives difficulty in all rapidly growing areas. Cases arise of districts, in which large houses erected in ample grounds, and let at rents bordering upon £120 per annum, are passing through a transition stage, the tenants leaving the district for the outskirts or the country. Circumstances arise compelling certain of the owners to realize their property at a much depreciated price, and the property in many instances passes into the hands of speculative builders. The land not being stringently restricted, the parties acquiring the property pull down the existing houses with a view to erecting rows or terraces of small houses, which, while complying with the by-laws, depreciate adjoining large houses and generally affect the amenity of the district.

Cost.

The estimated cost of any scheme will be somewhat difficult to accurately prepare, until some experience has been gained as to the possible interpretation to be placed on the various clauses by the arbitrators or valuers to be appointed by the Local Government Board, and how the cost of road works has to be borne; but in connection with this point it should be borne in mind that no compensation is payable in

connection with the provisions inserted in the scheme, which prescribe:—The space about buildings, limit the number of buildings to be erected, or prescribe the height or character of buildings which the Local Government Board consider reasonable.

It will be advisable therefore to fully consult the Board on these points and if compensation is not to be paid respecting these matters, conform to their requirements.

It is frequently stated that town planning proposals necessitate spending money entirely for the benefit of future generations. Reasonable and judicious expenditure upon necessary town improvements and town planning schemes is a sound business proposition, and all improvements of whatever nature are practically for future benefit.

The writer would suggest the following special points for the intercommunication of views and elucidation of opinion, viz.:—

- 1. The extent of district advisable to be included in a scheme.
- 2. The desirability or otherwise of conjointly with a town planning scheme carrying out a scheme of street improvement, possibly combined with a housing scheme.
- 3. The width and character and distance apart of (a) main radial roads, (b) main ring or cross roads.
- 4. The degree to which it is advisable to relax:—(a) by-laws respecting the construction of new streets, (b) by-laws respecting the construction of new buildings.
- 5. The number of houses to be erected per acre; the limitation of areas for special purposes and how this can be best applied; and the formation of shopping centres.
 - 6. How best to deal with the redevelopment of areas.
- 7. The extent of provision to be made for parks, recreation grounds, open spaces, gardens, school sites and public buildings.

The Artificial Lighting of Hospitals.

In visiting the principal London and other hospitals, says Mr. John Darch, I have been keenly struck with the universal want of discrimination in lighting; there is a kind of trade orthodoxy which cherishes certain forms and fittings, and decrees their use often in defiance of common sense. Take, for example, the ubiquitous plain 10 in. opal shade pendant, that does duty with equal impertinency in ward, kitchen, operating theatre, corridor, and consulting-room. It would be difficult to find a more irrational, inefficient, and indefensible fitting for most of the purposes to which it is applied, while it can hardly lay claim to be a thing of beauty. The shade affords no protection to the eyes of patients or nurses against the sting of the glowing filament, and from the fact that thousands of cardboard "eye-screens" have been sold to patch up this so-called "shade" for the necessary protection of the eyes of the healthy and vigorous in office and shop, it must be obvious that it is unsuited to a hospital. Again, the shade darkens the ceiling, and, by preventing reflection from its large white surface, practically darkens the room.

Another token of orthodoxy is the swan-neck bracket, which, with its popular form of "shade" that shades nothing, and its bare light has been described as "nothing less than an instrument of torture." In some hospital wards the brackets have been mercifully placed lower and closer to the walls. Much more might be said to show the need of reform.

It is not so much a question of gas v, electric or any other illuminant as that of the art of illumination which regulates the arrangement of the lighting units after they are brought into the room,

Light (and in that term radiation both visible and invisible must be included), like any other form of power, may become an agent of destruction or a minister of health and blessing precisely in accordance with the wisdom shown in its application; and it is the duty of the professional adviser, be he architect or engineer, to understand all that pertains thereto before he can pretend to satisfactorily invest his buildings with the instruments of such a force.

There are to be avoided, on the one hand, the evils of glare, and particularly that which, in a ward patient, would enter the lower part of the eye; the evils of excessive brilliancy, of violent contrasts of light and shade, and of the injurious and troublesome rays of heat and actinism; there is also to be avoided the risk of eye strain consequent upon insufficient light or upon the effort to see in the face of misplaced lights. On the other hand, there is to be sought the comfort of a soft and well-diffused light so arranged that vision may be both easy and pleasant, which, after all, is the proper object of lighting.

The value of illumination depends not on the amount of light that is shed throughout a room, but on that which is reflected from visible objects. An essential part, therefore, of any scheme of illumination is the colouring of walls and ceilings, the strength of which must be properly balanced with the amount of light available. Dark colours eat up the light and are therefore wasteful. White ceilings, cornices and friezes, not glossy, with pale tinted walls and slightly darker dados, will best serve the hospital and its inmates.

Let us proceed to consider some practical methods of dealing with the subject, and begin with

THE HOSPITAL WARD.

The average ward unit—of, say, 20 beds—should be provided with two kinds of illumination, viz., (1) general and (2) local.

1. The General Lighting need be no more than enough to see clearly about the room, say, 0.5 foot-candles.

No sources of light, nor any illuminated surfaces exceeding 0.1 candle-power per square inch (14 c.p. per sq. foot) should be exposed to the patients' or nurses' eyes; whereas the intrinsic brilliancy of the

Gas mantle averages	30	c.p.	per	sq.	inch.
Acetylene flame	40		,,	1	,,,
Electric carbon filament	400		,,		,,
,, metallic ,,	1,000		23		,,

Direct illumination, therefore, useful enough in the lofty out-patients' hall or elsewhere, is quite unsuited to a hospital ward.

Direct lighting lamps may, however, be used if provided with proper shades, but everything depends upon that word "proper." Glass shades and all transparencies are inadmissible, nor should any partial translucency exceed the above-named limit of brightness, while any shade that is used should effectually screen the eyes without materially darkening the room. If bracket lights are used for general lighting, a half circle shade should be used so as to illuminate the wall. The practical result of all this is a soft all-over illumination which is very pleasing.

High placed ceiling lights will prove equally successful with a carefully calculated shading.

Indirect lighting by means of the inverted electric arc is deservedly gaining favor, but although it would serve well in many parts of a hospital I could not recommend it for the ward, as the ceiling would be too dazzling for those who have to lie on their backs.

A happy effect may, however, be obtained from indirect lighting, with tungsten or other metallic filament lamps, placed inside a shallow metal bowl, white on the inside. To obtain the best effect they should be hung as low as convenient, nor should the lamp be set too low in the bowl.

The Artificial Lighting of Hospitals.

Night Lights.—Excepting in the winter, artificial lighting is little needed in the ward, for hospital economy favours very early hours, but some sort of subdued lighting is necessary during the night watch all the year round. With gas or acetylene a small burner, shaded, on a bye pass would do. In electric lighting, several expedients have been adopted, but a 2 c.p. shaded lamp is the most economical. An excellent arrangement is indirect lighting from an 8 c.p. lamp in a small bowl. This is employed, for night purposes only, at Tooting Bec Asylum.

2. Local Lighting.—The sisters' and nurses' tables should each have a well-shaded lamp, that is adjustable in height, so that any desired intensity may be obtained. A comfortable illumination for reading is 4 ft. candles, but 10 ft. c. is not too much for some purposes. A good form of shade is a deep cone of dark green opal, with the lamp entirely recessed. A more cheerful form would be one with a rose silk flounce with white lining, deep enough to hide the lamp, and for cleanliness the top should be of white opal glass, and the flounce easily removable.

The Patients' Lights are best placed one at the head of each bed, hidden in a dark green opal shade and somewhat to the left so as not to radiate heat on the patients' head, and to avoid gloss in reading; an illumination of four candle feet should be available. This lamp will be useful for examination and should illuminate the patient's chart. Near this there should be a plug for a hand or standard lamp.

If gas is the lighting medium a "bijou" inverted mantle similarly shaded would be suitable for both patients and nurses. If acetylene, a small flame burner.

Steadiness is an essential condition of good sanitary illumination, for fluctuation and flicker are not only very disturbing but may amount to permanent injury. This trouble may arise (a) from the glow lamp when used on an alternating current whose frequencies are below, say, 35 per second; (b) from an arc lamp when the light varies in intensity and colour, due to unsuitable or impure carbons; or when it "pumps," due to defective feed mechanism; (c) from the gas mantle, due to an ill-regulated air supply, accumulated condensation in pipes or the wind from the open windows of the ward; and (d) from all flame burners by the two last-mentioned causes.

Gloss is frequently as troublesome as bare lights, and yet the majority of hospital wards have shiny ceilings. There should be no difficulty in getting a diffusive or dead surface as sanitary as that of the objectionable gloss.

THE OPERATING THEATRE.

The operating theatre needs good artificial light and plenty of it, for there is a large proportion of surgical work done after dark. It should have a separate general illumination with screened lamps over the sinks and sterilizers. The ceilings and walls should be completely reflective, and are best lined with close-jointed white glazed tiles or opalite, with a little relief in the form of a pale green or grey dado.

The illumination of the operating table is, of course, the leading consideration. The light should approximate to the colour, the perfect diffusion and the high intensity of broad daylight; both the nuisance of overhead heat and the septic risks of dust collection should be avoided, and the fittings and glass employed should be plain, smooth and easily cleansable.

It is important that the lights should not all be clustered together, forming deep and troublesome shadows, nor be situated directly over the table to worry the surgeon with the shadows of his own head and hands, or that would necessitate the frequent shifting of the table. Yet these are the arrangements most commonly met with.

Every hospital has its own pattern of operating light (scarcely two are alike), while many of them are very curiously contrived. The following may be taken as typical of the more usual arrangements:—

- 1. One or more plain shade pendants of the common type, sometimes with a dust raising counterweight and pulley.
 - 2. A cluster of from two to twenty glow lamps under a large opal shade.
- 3. Rectangular trough 4 ft. long with opal sides, full of lamps and sometimes with a sheet of opal glass underneath; this gives an excellent light, but the heat is intolerable.
- 4. A four or six-light electrolier, each arm with a separate lamp and opal or aluminium bell shades.

Either of the foregoing may depend from the ceiling or from the end of long swing brackets. Glow lamps should have metallic filaments; tungsten is said to give the whitest light. Gas burners are sometimes attached.

At Charing Cross the drawback of concentration is well met by distributing the light over the long arms of four brackets and round the gallery front.

The London Hospital and that at Ryde are fitted with Marshall's operating light, consisting of a fixed central 100-c.p. lamp under an opal reflector, with four hinged arms, each with a 60-c.p. Nernst lamp in a condenser tube projecting the light to any desired spot.

Electric Arc Lamps are employed in some continental theatres.

Direct lighting with ordinary arc lamps is out of the question on account of the unavoidable shadows; excepting, perhaps, for general lighting; but where there is a large skylight a splendid direct illumination may be obtained from white flame arc lamps, which have a remarkably high efficiency, and throw most of their light downwards. Four of these may be suspended over, but not too close to, the ceiling light, which should be of clear fluted glass to spread the light. They may be fixed, or may move on rollers worked by cords in the room. Questions of dust and the intrusion of lamp trimmers are thus eliminated.

Indirect arc lighting, particularly where there is no skylight, is eminently suitable. Four 10-ampere open arcs, properly placed and reflecting directly against a white ceiling, would give a brilliant illumination with all the advantages of daylight.

Professor Siedentopf has invented an ingenious arrangement for lighting the operating table by means of isolated beams of light which are not only ample, but entirely avoids the dust question.

Emergency Lights.—Electric fuse wires have a knack of "going" at most inopportune moments, while a break down on the part of a supply company is not unknown; it is therefore essential to have a reserve for such an emergency. The fusing trouble is more common on branch circuits; one excellent precaution, therefore, will be found in wiring glow lamp fittings from two separate main branches, either of which failing, enough light may be left to work by.

To provide against failures on the main there are two methods:-

- I. A gas lamp with an inverted mantle, as at the West London Hospital, which should be lit during operations.
- 2. An electric accumulator, from which a small emergency lamp should be kept alight during operations, and in connection with which it should be possible to immediately switch on sufficient light from the accumulator to complete an operation. Separate lamps would be required for this purpose unless it would be convenient to have the voltage of the accumulator equal to that of the circuit.

Some hospitals keep oil lamps ready to hand.

Hand and standard electric lamps of a variety of patterns are to be found in every operating theatre.

THE DISPENSARY

Is usually the worst served of any department. It is, in London, frequently to be found in the basement or in some other part of the building lacking daylight, while the artificial illumination is commonly so inadequate that it sometimes becomes a difficulty and a worry to read the prescriptions. Many of the bottles abide in gloom, while the poison cupboard which, with its small bottles needs a particularly good light, often fares no better. Happily, the busy dispenser acquires habits of caution, and mistakes are rare, but when a dispensary has to make up from anything to 500 bottles of medicine daily, it is surely worth the cost of better lighting to minimise the risk, to say nothing of avoiding injury to the eyes of the dispenser.

A properly shaded light yielding four or five foot candles is required to each man on the dispensing benches. The shelves should be illuminated with screened lights to facilitate visual acuity, in fact, no bare lights should be visible. Undoubtedly, the inverted arc lamp with a white ceiling would afford the best illumination, while the running cost of it should compare favourably with that of glow lamps.

The Artificial Lighting of Hospitals.

Where is the dispensary or laboratory that provides facilities for reading the graduated measuring glasses? Nothing is more productive of eye strain than the effort to decipher any kind of graduated scale, but with the faint lines of a glass measure in the twilight of the average dispensary held up to a patchwork background of bottles the strain is increased. It would save time and afford comfort if small white screens were fitted up, one in front of each man, adjusted to catch the chief incident rays from a skylight or window at such an angle that they reflected towards dispenser. The same screen could be used under an artificial light or in a permanently dark situation, or there should be an illuminated panel of either reflected or transmitted light.

The commercial mind has realized that the health of the worker is the wealth of the employer, and that the extra cost of better illumination is repaid a hundredfold in time saved and better work produced. Hospital authorities might do well to look at it in this light, if no other.

I have dealt only with the three characteristic departments of hospital service, and regret that space has failed me to treat of such equally needy subjects as the proper illumination of sight-testing types, the lighting of the consulting room, the out-patients' departments, the corridors, staircases and general service rooms, but I trust that sufficient has been said to demonstrate the need for reform and the direction it should take.

The Influence of Building Regulations on Architecture.

Mr. H. D. Searles-Wood, F.R.I.B.A., expresses the view that in modern building regulations three things are considered—1st, the prevention of the spread of fire; 2nd, the construction of the building to guard the safety of the public; and, 3rd, public health.

It is the regulations that deal with the prevention of the spread of fire that has had the greatest influence on the architecture of the period.

The regulations passed after the great fire of London set the fashion for brick and stone-fronted buildings which altered the appearances of all the towns in the kingdom, and in more recent times the Metropolitan Building Act, which was the first set of building regulations that seriously dealt with the problem of the prevention of the spread of fire, made marked changes in the architecture of the nineteenth century. The $4\frac{1}{2}$ in. reveal to all windows and doors, and the restrictions as to baize boards and wooden cornices and the parapets to the party walls, are the marks of this set of regulations.

The rules laid down in the Metropolitan Building Act of 1854 for dealing with the rights of the building and adjoining owner of a party wall have worked so well that it is suprising no other city or town has adopted the same system. The system is, briefly, as follows:—

When a building that has party walls is about to be rebuilt the building owner serves on the adjoining owner's party wall notices which describe the work that is to be done to the party walls, and in this notice the building owner appoints a surveyor to represent him. If the adjoining owner does not agree within fourteen days of the service of the notice a difference is said to have arisen, and the adjoining owner appoints a surveyor to represent his interest, and these two surveyors meet and appoint a third surveyor.

The first two surveyors then examine the party structure and draw up an award in which is set out the work that has to be done, and when this award is signed by the two surveyors it is published and the matter is settled. Should the two surveyors not be able to agree on an award the third surveyor is called in, and within seven days he has to appoint a day for a hearing, and the three surveyors meet, and any two of them can agree on an award, which when signed by the two is published and becomes a binding document, only to be upset on appeal before a magistrate. The position of the third surveyor is not quite that of an arbitrator, he is only equal in rank to the other two surveyors, but it has been found to work well, and many awards are made by means of the third surveyor which could not be made between the two surveyors in the first instance. The third surveyor being quite impartial can complete the award which one of the interested surveyors would not care to sign. This method of

dealing with a difficult situation is really a good help to architecture, and some such system should be part of the statute law. At present the law on the subject is that the party structure is common to the two parties, the building and the adjoining owners, and it cannot be touched without the assent of both parties, and there is no means of compelling this consent. It is in this respect that the London practice has such great advantages.

There is a tendency nowadays to complain that the model by-laws are too severe, and that they prevent the building of cheap cottages and elementary schools. At the first exhibition of cheap cottages at Letchworth, the cottage that won the first prize was in accordance with the model by-laws in every particular. In going round the numerous Garden City developments, the only two things in the by-laws that appeared to increase the cost were the height of the bedroom storeys where 9 ft. is insisted on, and the height of the studded walls, which is also regulated by this by-law. In places where the storey is 8 ft. the available area is also increased, and there does not appear to be any serious sanitary point in requiring 9 ft. storeys.

The Building Acts and model by-laws are all based on brick construction; the introduction of skeleton steel construction and re-enforced concrete, necessitates some changes in these Acts and by-laws.

The Royal Institute of British Architects have just issued a second edition of the Regulations for Re-enforced Concrete Construction, which are the standard for such method of building in the British Empire. This revised edition will be the basis of the Regulations about to be issued by the London County Council, and will be dealt with very much on the lines of their Regulations for Skeleton Steel Construction, which are in their Act of 1909. The principle is that the calculations on which the steel construction has been designed are submitted, with the drawings, to the district surveyor, who checks the calculations before the plans are approved. These calculations can be made in any form that is recognized by the profession; but a good method of tabulating the calculations has been drawn up by the District Surveyors' Association and approved by the Royal Institute of British Architects, and it is a great saving of time and labour if the information is given by the architect to the district surveyor in this form.

Some people are of the opinion that the time has come when there should be a general Building Act for the whole country; let us hope if this comes to pass that it may be so drawn as not to stereotype existing methods of construction, but stimulate new and better methods than at present. It might be a good thing to encourage architects to work out the strains and stresses in their structures by making a law that the methods of calculating the designs should be submitted to the District Surveyor, and if found correct the construction should be allowed, and thus do away with all those cast-iron schedules and rules that so often hamper an original design.

National Sanatoria.

Mr. Edwin T. Hall, F.R.I.B.A., says the Sanatorium, in a nutshell, is the embodiment of the root idea of open-air treatment under medical supervision. It is strange nowadays to find that although the necessity for this open-air treatment has been insisted on by apostles of health at intervals over centuries, and more persistently in the eighteenth and nineteenth centuries, their gospel was for a long time unheeded or ridiculed, they were as "voices crying in the wilderness." But such voices are not lost. They create wave sounds which, however attenuated they may appear to become, fall here and there on ears that are attuned to receive them, and new centres of dissemination take up the cry and carry on the message.

When at last the new doctrine came to be tentatively accepted, it was held that to make it efficacious patients should be located on mountain tops at altitudes where it was said no tuberculosis existed, and the first Sanatorium was erected at Görbersdorf, in Silesia, in 1854. This presumption, however, was found to be inaccurate, and it was shown that altitude had nothing to do with the disease. Happily so for all of us in the United Kingdom.

It is now demonstrated that any site on a suitable soil that is sufficiently elevated for good drainage, for prospect and for openness is suitable for a Sanatorium, provided it is not too exposed.

What is a Sanatorium? It is a residential school of hygiene, where patients in the early stages of tubercular infection are taught primarily to take the fullest advantage of open air and sunlight, and to regulate their lives in certain ways—as to hours of rising, eating, resting, working, and sleeping, that disease may be arrested and eradicated, that vitality may be stimulated, that energy may be renewed, that the subject may come out a healthier, stronger, and better citizen, and able to exercise the influence of his first-hand knowledge and disseminate the lessons he has learned.

There is much to be considered in the selection of a site for a Sanatorium. First of all, in considering competing sites, ascertain the average number of hours of sunlight to which they are subject and give preference to those with the best record; next learn the relative humidity of the air from local causes, and note that site which has least. I have already shown that a great altitude is of no importance. What is important is that the site shall be open to the winds of heaven, that is to say that there shall be free currents of air all round and through the buildings, that there shall be abundant access for sunlight, and that it shall be cheerful.

To attain these ends the site should be elevated above the land to the south, and on the colder sides it should be protected. But here a note of warning is necessary. By many a dense belt of woodland quite close up to the building on the northern and eastern sides has been encouraged. That is a mistake. I know of one of the largest and most important Sanatoria on a beautiful site with a magnificent panorama to the

south, where the trees were so dense on the other sides that the buildings were humid, the general air stagnant and fungus abounded. Trees should be cut back to a considerable distance, and avenues should be made through them to allow great rivers of air to sweep through and around the buildings. In the quoted case I advised these alterations, my advice was adopted and the marked improvement has more than justified our expectations.

Incidentally, I have referred to prospect. This is of great importance. Shut in by woods or other limitation of panorama, a feeling of depression is engendered which is greatly to the detriment of patients. Extensive views, on the other hand, broaden the outlook not only of the physical eye, but of the mental vision. The play of light and shade, the kaleidoscopic changes of the clouds, affecting the colours in trees and herbage; the movements of man and beast and bird, of distant ship and of storm—all are helpful, interesting, and stimulating to the sick and weary.

Subsoil is of importance. Clay as a subsoil is liable to get waterlogged with resultant mists from evaporation. Gravel pockets in a general clay formation are not good because the subsoil water becomes stagnant and gives off noxious gases.

Loose sand on the surface is worst of all, the gritty brittle particles blown by the winds are great irritants to the respiratory organs. A rocky soil is best so long as it has a verdant supersoil. The greensand formations are good, and pine trees flourish on it with their resinous perfume.

The buildings should be set well away from all dusty roads.

I do not propose to deal at any length with the important matter of sewage disposal. That is now so well recognized that it is unnecessary to dwell on it.

Walking exercise is essential to the treatment of patients, and a considerable area of site is required for exercise where there is no open country with public commons or uplands. In any case, however, there should be an ample area for agricultural and other manual work.

This treatment is superseding the older treatment where patients were allowed to idle the whole day and to be fattened up. The Sanatoria which pursue the other course, of providing and initiating the desire to work, not only produce the best cures, but are doing a great economic service to the patient and to the community. I would commend to your notice the results at Frimley under the able and untiring direction of Dr. Paterson.

The recently published report of the Royal Commission has settled, in the affirmative, the question so long in dispute, as to whether tuberculosis could be communicated from cattle, and it would appear to be advisable that every large Sanatorium should have its own cows, whose milk should be under constant analysis by the medical staff.

Coming now to the type of the building itself. Much has been said and written as to the relative advantages of single and multi bed wards, of isolated huts and congregated rooms.

Single huts are reasonable where few patients have to be treated. The one room habitation is primitive, whether it be of wattle, of canvas or of boards, but if a large number of people are to be housed, fed and supervised, and are to have the amenities of prospect and open surroundings, their huts would cumber the ground, and their abodes must be brought together so as to leave the necessary open spaces. This eventuates in a large building, or may be series of buildings, where apartments for patients are convenient of access from the administration, where baths for washing and for hydrotherapeutic treatment, and sanitary accessories may be disposed for general convenience, and where drainage may be concentrated and minimised.

If this be admitted as the necessarily practical development of the aggregation of sick persons, as in its essence it accounts for the formation of towns, then I think it will be fair to say that public Sanatoria which have to deal with the masses should be started on the lines in which, as they become larger they must develop.

Practically all the Sanatoria dealing with any considerable number of patients abroad or at home are on the concentrated principle. Nordrach is an exception, but that was a pioneer institution, is for paying patients, and is a colony of several houses which have been absorbed or built as the number of patients increased.

There are other artificial villages deliberately designed for paying patients where the house is large enough for a family or two. Of such is Montigny in the north of France.

These, however, are not the normal Sanatoria.

GERMAN SANATORIA.

Speaking generally, the older Sanatoria in Germany, as well as other Continental countries, and in many cases the modern ones, are of several storeys in height—based apparently on the military idea of a barracks; and, as patients could not constantly be going up and down many flights of stairs, provision was and is made for their remaining out all day in *liegehallen*, or resting-halls fitted with couches, all open to the air.

I cannot but think this provision a condemnation in itself of the main building as nnsuitable for its purpose—unsuitable as a type of building; and the fact that the provision is perpetuated in many low buildings is only an evidence of the continuation of tradition.

The Sanatoria at Falkenstein, near Frankfurt, was originally a private mansion, to which additions have been made from time to time, the patients', or main block, is four-storeyed, connected on the ground floor by long covered promenades to the dining-hall on the one hand, and the doctors' consulting-rooms on the other. It

accommodates 125 paying patients, has all the comforts and luxuries of an hotel, ably managed, however, by medical men. The location and scenery are beautiful. It has its own cows.

Ruppertshain, near Konigstein, built as a Sanatorium, is three-storeyed, in crescent form, containing 122 beds for patients.

Albertsburg is two-storeyed, differing from the general type in the aspect of several of the wards. It has a *liegehalle* on each floor in the recesses formed by the projecting wards.

Edmundsthal is another type of design, the end pavilions of the front block are square, each divided into five cubicles of four beds each, and between these pavilions is the *liegehalle*. The rear block is differently treated.

Among other large hospitals I may just mention Berlitz, near Berlin, which, when completed, will consist of twenty main buildings and many smaller ones. The main pavilions are two-storeyed and are E-shaped.

Belsig, near Berlin, is one building of two storeys for 125 patients.

Meschede is four-storeyed, crescent-shaped on plan, and is for 114 patients.

SWEDEN.

The Stockholm Hospital is a large institution, ultimately to consist of eighteen blocks of buildings, containing 1,248 beds. There are three principal blocks, long parallelograms, containing 348 beds each. Another building contain 40 beds, and two "Summer" pavilions 28 beds each.

At Osterasens the Sanatorium has 104 beds. The main block consists of four one-storeyed pavilions in two parallel pairs, connected with the central administration by covered ways.

Halahults Kronopark is on three storeys, with 102 beds. This is on the more normal plan, the patients' rooms connected to a central administration block.

HOLLAND.

The Sanatorium of Oranje-Nassaus Oord is a semi-circle on plan, two storeyed in height, the group of rooms being separated by *liegehallen*. It is a novel and interesting design.

Hoog-Laren Sanatorium for the City of Amsterdam has a main block, in form a long parallelogram, with a central corridor.

FRANCE.

The Sanatorium d'Agincourt (Oise) has two patients' blocks, each of 164 beds. It has its galerie de cure, or liegehalle.

Hauteville (Ain) contains 110 beds in three pavilions of two storeys, with a basement. It is of the crescent type of plan.

Montigny-en-Ostrevent (Nord), to which I have already referred, is of the village type, the houses each designed for two families, and there is one isolation block.

Returning now to our own country. Taking them in chronological order we have:—

The Frimley Sanatorium, Surrey, now contains 150 beds on two storeys. The plan of the patients' block differs from every other Sanatorium. It has a central administration in which are four small wards for cases requiring special observation, and from this centre four radial arms contain the remaining patients' beds, each floor being entirely cut off from the other. All on the ground floor open directly on to paved terraces. It is claimed for this radial plan that no patient is more than 150 ft. from the administration, with all that that suggests in a large place.

The sanitary towers are between each pair of arms. All wards have uninterrupted prospects, and all face south, south-south-east, or south-south-west. At the rear and quite detached are the public rooms, the kitchen, doctors' and nurses' homes.

It has no *liegehallen*, as they are contrary to the view held by the medical superintendent.

This Sanatorium is free.

Northwood, Middlesex, is for 114 patients, in two storeys. It has a small central body and two long wings with aspects south-south-east and south-south-west.

The King's Sanatorium, in Sussex, is for 100 patients, in two and three storeys. The patients' building faces south or nearly south, and there are balconies outside practically all the rooms capable of taking beds. The administration building is parallel to the other on the north and connected by a long gallery. This institution is for paying patients.

Winsley, near Bradford-on-Avon, is for 60 patients, in two blocks, one of three and one of two storeys, exclusive of certain *chalets* for eight more. It has a large *liegehalle*. The Sanatorium is interesting because nearly two-thirds of its beds are appropriated by local authorities or commercial firms, the other beds are for paying patients.

The Crossley Sanatorium in Cheshire is for 90 beds. Its patients' block is a long building three storeys high, with rooms in the roof above. All wards face south. Of the total beds 36 are for paying patients, the remainder are for the poor, and of these the Manchester Corporation, for a contribution of £1000 a year, is entitled to 20 beds for its poor.

It would now appear to be desirable to consider some details of the planning. Should each patient have a separate room, or should 2, 3, 4, 8, 10, or 20 be put together?

The objections to multi bed wards are that one patient coughing disturbs all the others, and those who are bad depress those who are recovering. On the other hand,

two or three patients together are company for one another, and among the poor, used to such companionship, this comforts them. I feel sure, from my own investigation and from conversations with medical superintendents, that the large majority of rooms should be single bed, but that a few of 2, 3, and 4, perhaps 5, may be of advantage; large wards are to be deprecated.

As to cubic space per bed, when it is borne in mind that in a well-designed Sanatorium the rooms are practically in the open air by means of through currents, I believe that the cube need only be such as to ensure ample space on the floor for the necessary furniture, and for patient, doctor, and nurses, with a reasonable height for comfort. The large cubes are wasteful. In single bedrooms 1,300 cubic feet is ample, while in rooms with two or more beds a much lower cube may be safely adopted.

Rooms should be flooded with light, and the windows, all made to open, should be of large area and carried up to the ceiling. On the inner wall there should be large openings, and on the opposite side of the back corridor there should be corresponding openings, so that the air may be constantly changed in every part of the wards.

With rare exceptions there should only be one row of bedrooms on one side of a corridor.

It is manifest that cost is an element of great importance when large numbers have to be dealt with; that the prevention of fire is another. The cost per bed varies naturally in relation to accessibility of building material and cost of labour. Sanatoria in England, built of brick and stone as distinct from temporary wooden structures, range from £350 to £1,000, and it is said in one case to be nearer £2,000 per bed.

In cases where local material is not available, when the distance from a railway is considerable, and where the institution is a large centre, self-contained, perfectly equipped and built on up-to-date hospital lines, providing its own water, electricity for power and lighting, its heating and hot-water installations, its laundry full of machinery, engine and boiler-house, kitchen, etc., fitted with labour-saving plant, ovens, etc., stores, recreation room, workshops, research laboratories, mortuary and postmortem rooms, an elaborate system of drainage, residences for medical and nursing staff, servants, gardeners, etc., I do not think £500 per bed is excessive. These central institutions are necessary, and fill a definite place. But the Sanatoria under the Insurance Bill cannot be of the same elaboration. They ought not to be of boards (that material is far too dangerous in a wooded district), but may be, pace all by-laws, of a permanent character, one storey in height, with walls and roof three of four inches in thickness, without elaborate foundations and all the cost these entail.

As a result of a lot of study, I believe that Sanatoria of various sizes can be erected on a suitable and fairly accessible site for £100 per bed. I have standardised every part of the construction as well as the eight bed units of wards, the units of administration and of residence.

The two latter are made proportionate to the number of beds. If a Sanatorium of 16 beds is erected it can be increased at any time to 32 or 48 or 64 or more with a corresponding increase in other departments, without pulling down the old.

A laundry is provided at the north.

The enclosing material, including floors, is of non-combustible slabs of standard size, impervious to vermin and readily fitted together.

A pure water supply is of course a sine quâ non, and if no public gas supply is available a small plant could be installed for heating baths, for cooking and for lighting.

Fireplaces of special design to avoid dirt are adopted, to avoid the great expense of an engineering plant.

Earth closets could be used if the site is in a rural situation. The drainage would then be of soiled water only, taken to cesspools, emptied by suction carts as at Nordrach, and distributed on the agricultural land.

If a small establishment of 16 beds is in contemplation, a qualified matron and nurses would be supervised by a non-resident physician. For 32 beds, quarters are provided for a resident medical superintendent. For 48, provision is made for two resident doctors, with a matron, a house-keeper, and, of course, a larger staff of nurses and servants.

It is suggested that, as at Frimley, patients should not only be trained to make their own beds, but to do all kinds of other work, such as digging and planting, carpentering, painting, etc., so that the maintenance would be reduced to a minimum.

In all essentials the design of the smaller Sanatoria comprises everything that is found in the larger and more costly Sanatoria. All rooms face south, south-south-east, and south-south-west. Each unit has six single bed and one two-bed ward with a sanitary annex and linen store. Each unit is detached from its neighbour, allowing for classification and avoiding the spread of fire in the possible event of carelessness.

All rooms are accessible at the rear by a covered verandah and have a terrace in front covered at discretion, either by a glass roof or, as at Frimley, by canvas shop blinds.

A common dining-room is in the central block, close to the kitchen and stores.

The whole scheme is one for open-air treatment in the fullest sense.

On some such lines as are here indicated, it would be possible to so use the machinery of the new *Bill that large numbers of people could be treated all over the country, and many here may yet live to find consumption a thing of the past.

Construction of Cowsheds.

Mr. J. H. Sutton, of Nottingham, in dealing with the reconstruction of a cowshed or the conversion of a building into a cowshed, assuming that it is structurally fit for such purpose, *i.e.*, built of stone or brick, says the first thing therefore will be to ascertain if the situation is suitable. The door and window side should, if possible, face south, so as to get the maximum amount of light behind the cattle, and secondly, to protect them from the north and east winds.

Next we should ascertain if the internal dimensions are satisfactory, which is as important almost as adequate cubic space allowance. By internal dimensions I mean the length and width of the building. The width should not be less than 14 ft.; 15 ft. is more desirable, and even this amount would not allow for the construction of a feeding passage.

Next in order would be the cubic space which determines the number of cattle which the shed would accommodate. It often occurs that you may have ample floor space for a certain number of animals but insufficient air space, in which case the extra floor space can be utilized for feeding passages, etc. Having decided then that the shed is suitable and can be converted at reasonable cost, we can now proceed to specify the necessary means for lighting, ventilation, paving, drainage and water supply.

Lighting.—A cowshed should be well lighted by windows in the side and end walls and roofing. Glazed windows not less than 4 ft. square, one-third of which should open inwards, should be fixed in the wall at the rear of the stalls, one window to every 4 cows.

The advantage of this window over the hit and miss is that when closed it admits light. The top sash opens inwards, and is hinged on the transom bar; a catch is provided at the side and the opening can be regulated. The incoming air is projected upwards instead of being admitted directly on to the cattle. This is an important consideration, as recently calved cows are susceptible to cold, and this necessitates such openings as the hit and miss being closed.

Glass lights or tiles in the roof are also to be recommended, and it is sometimes convenient to fix a window in each gable, but in this case it will be advantageous to have the top portion louvred.

The next consideration is ventilation, and it is most important that it should be judiciously carried out so as not to create draughts. Cross window ventilation is advocated by some authorities, *i.e.*, openings behind and in front of the cattle, by which means there is a current of air passing over their backs. My experience has convinced me that this system is wrong, and wherever I have seen it put into practice it has resulted in the cattle suffering more or less from chills, and the consequence is that the farmers stuff the openings with hay or other material. The system of

ventilation then must be so constructed as to allow of the air of the cowshed being constantly changed without producing a draught, and at the same time the openings must be so placed and constructed as to prevent their being rendered ineffective or closed.

Ridge ventilation is the system to be recommended both on account of its simplicity and effectiveness, and also because it is not easily accessible to stop up. This method can be adapted to any cowshed that is open to the roof (which all cowsheds should be), and whether the roofing is composed of tiles or slates the cost of raising every second, third or fourth tile is small.

The side hopper window projects the current of incoming air in an upward direction and this displaces the foul warm air which is forced through the ridge openings. The above two methods are adequate to ventilate any cowshed provided that the openings are sufficient in number. More light and ventilation can be obtained, if the cost is no object, by a gable combined light and ventilator.

In setting out the stalls, mangers, passages, etc., I will assume that we are going to have a feeding passage, which should always be insisted on when the width of the shed will allow of it; 3 ft. 6 in. to 4 ft. is sufficient. Apart from the convenience in feeding it allows an open breathing space in front of each cow and is therefore more healthy.

One of the cheapest and best form of mangers is the 18 in. invert pipe, and those with sockets attached are to be preferred, as this permits of the mangers being laid in one complete line down the shed. It is only necessary then to make the divisions between the mangers with $4\frac{1}{2}$ in. brickwork, and the partitions can be cut down into the mangers if desired. It is advisable to fill in the spaces behind and in front of the manger with concrete to prevent rats from undermining it. The bottom of the manger should not be lower than the stall floor, and about two courses of $4\frac{1}{2}$ in. common brick with a hard wood capping should be fixed in front of the manger and the capping continued over the division walls. It is important that the height of this wall, including the capping, should not be more than 10 in. from the floor, or it will force the cattle back to the channel when lying down. The wall at the back of the manger should consist of 9 in. common brick, also provided with a wood capping, and the height need not exceed 2 ft., the idea being to have an uninterrupted breathing space for the cattle; above this one or more galvanized iron pipes can be run through the partition posts to prevent the cattle from getting too far forward.

The main posts of partitions should preferably be of oak, about 6 in. by 5 in. and fixed well below ground, with cross rails 4 in. by 3 in. mortised into them. Planed 1 in. boards are fixed vertically to each side of the cross rails. The length from manger front should not exceed 4 ft. It is important not to have these partitions too long, otherwise the space for milking is limited. The height should be about 4 ft.

The floors should consist of some impervious material, such as concrete and cement, or concrete and blue pavers laid in cement. I prefer the latter because they are more easily kept clean. They are impervious and are fairly smooth on the face. The size of these are 9 in. by $4\frac{1}{2}$ in. by 2 in. It may be said that these materials are too costly for floor paving, but I would reply that it is the cheapest in the long run. I have seen such a floor that had been used for forty years and had not cost a penny for repairs during that period. If soft brick and stone paving is used it is always out of repair and lends itself more readily to the absorption of liquid.

The stalls should not be more than 5 ft. 9 in. from manger front to channel, with a width of 7 ft. between partition boards for two cows; I have experienced opposition both from farmers and architects with reference to this length, but I am convinced that it is the best means of preventing the cattle from lying in their dung, and once given a trial is always repeated. The floors of the stalls are allowed a slight fall to the channel, so that when washing down the water will drain away freely.

The first and most important part of the floor to be laid is the curbs each side the channel, which should consist of blue-bricks on edge, set in cement. The heel curb may be laid level from end to end of the shed. The height of the curb above the channel should be 4 in. if possible, but this height will vary according to the fall of the channels. This drop will prevent the cattle from lying in their dung.

Channels should be 2 ft. wide, including a $4\frac{1}{2}$ in. invert channel for carrying away the urine. They have a slight fall to the rear sufficient to carry off the urine, and also slope towards the exit channels, one of which should be provided for every 20 ft., and should deliver on to a gully trap outside. If these exit channels are not provided, especially in a fairly large shed, the depth of the channel is considerably reduced owing to the fall required.

The exit channels, which are intended to convey the liquid to the outside drains, can be reduced in width to about 9 in., and only need be very shallow, especially if the invert channel is used, in which case it is continued through the wall to a gully trap.

The Rear Walk should not be less than 4 ft. from wall to channel, otherwise the walls soon become fouled with dung, and the floor should have a slight fall, and a drop of 2 in. to the channel. A cowshed would therefore require to be 18 ft. wide to allow for these measurements, as well as 4 ft. for a feeding passage, and 2 ft. for the mangers.

The inside walls in rear and at the two ends should be composed of some impervious material, to a height of 4 ft. 6 in., because this portion requires constant cleansing. Brown or white glazed bricks are suitable, but surface rendering in cement is to be recommended, because of its cheapness and adaptability. Cement is impervious, is easily cleansed, and if limewashed the same as the upper portion of the walls, any accumulation of dirt or dung is easily detected.

Drains from cowsheds, manure-pit, etc., should be laid under the pavements, as this affords a certain amount of protection from heavy vehicles. The drains should lead to a properly constructed cesspool, which should be situated in an adjoining field.

Where the water is supplied under pressure through pipes, these can be fixed inside the shed and fitted with one or more nozzles, to which can be attached a hose-pipe for washing-down purposes; also, it is convenient to have a short branch-pipe passed through the wall to supply the drinking-trough for the cattle, which should be at the side of the pavement.

Where the water supply is limited (e.g., drawn from a pump or well), it is a good plan to have a duplicate discharge-pipe attached to the pump through which the water can be pumped to the trough. It is then convenient either for the cattle or for washing down the pavement.

The Domestic Fireplace and the Smoke Nuisance.

Mr. J. Macaulay, Chief Smoke Abatement Inspector, Liverpool, says the smoke from domestic fireplaces is worse, in the aggregate, than that from industrial furnaces, and very little effort has really been made to lessen it. A beginning might be made in the domestic science classes in schools, where girls could be taught how to light a fire, and how to attend to it through the day.

The present practice when lighting a fire is simply to smother the sticks with coal and then set a match to them, while during the day it often occurs that the fire is only replenished when it is on the point of dying out; then enough coal is thrown on to last a considerable time, much smoke resulting in both cases; and finally, when the chimney becomes fouled with soot, it is considered much easier to set fire to it and send the dirt out, than to have it swept and have the dirt within.

In the construction of domestic fireplaces more fire-brick and less iron should be used; while chimney flues would offer less resistance to the ascending gases if lined with smooth fireclay pipes, properly jointed, than they do now with the rough angular projections formed by the ends of bricks, which make the cleaning of the flues an impossibility.

The method of supplying heat, steam and hot water from central heating stations, which has been in operation in the United States of America for twenty-five years, and which has received renewed attention there within the last six years, is worthy of consideration in the planning of new blocks of buildings. In such a system the purchaser of heat avoids the annoyance of having to supervise the operation of the heating plant, as well as the dust resulting from the delivery of fuel and the removal of ashes.

Mention must not be omitted of the benefit to be derived, in the direction of smoke prevention, by the use of gas cookers.

The Modern Abattoir and its Methods.

The modern abattoir, says Dr. J. Sherwood New, may be said to have originated in Paris in 1823, and to have been developed to a high stage in Germany since. No apology, therefore, is needed for turning to Continental practice as the chief source of information.

Mistakes commonly made are: -

- 1. No room allowed for future extension. This is easily sateguarded in first plans by the provision of rectangular spaces adjacent to buildings. These are laid out as grass plots.
- 2. Usefulness of buildings sacrified to symmetry of design. This is chiefly in France.
- 3. Insufficient supply of water. The slaughter-hall requires from 60 to 150 gallons of water per beast killed, according to various authorities. The meat-dressing room requires most, and this includes a large volume of hot water.
- 4. No refrigerating plant. In its absence in hot weather very irregular hours have to be worked, rendering effective inspection impossible.
- 5. Incorrect proportion of buildings to work to be done. This is especially true of relative number of bovines to that of pigs and sheep.
- 6. No adequate means for dealing with by-products. These form the chief source of income. In absence of good plant and system, nuisance is inevitable.
 - 7. Access from road, rail, or wharf to the lairs and pens not made short and direct.
 - 8. The lairs not placed out of reach of smell and influence of slaughter hall.

THE SLAUGHTER HALL.

The modern type is always that of an open hall with no inner walls. It is customary to subdivide the place for slaughter into two halls, the one for large cattle, the other for pigs and sheep, but this involves increased inspection. The hall must receive light on at least two sides. Its ventilation must be good and unaffected by the waiting pens if in close proximity. It must communicate along its whole length with a roofed yard through which, by runways, it is in close relation with the cold store rooms and the buildings adjacent. The roofed yard protects meat in transit to store, and also meat in process of delivery to butchers' carts.

The slaughter hall walls must be fitted with sanitary surfaces to the shoulder level, and with a hard non-slipping floor with grooves arranged to discharge into gullies and drains. It must also be provided with an ample water supply.

The following special departments are found to be essential in foreign practice:—Gut and stomach cleansing room; scalding tank room for pigs; tripery or meat dressing room; brine pickling room; condensed meat process room with special plant; laboratory and inspection rooms for trichinosis samples.

The Modern Abattoir and its Methods.

Pig scalding tanks must be kept from affecting general air of slaughter hall by the warm and moist vapour, which easily becomes offensive from fatty matter present; either in separate building, or else screened off from main hall by a partition coming down to 8 ft., and with good exhaust ventilation fitted over tanks. These must be in close relation with the pork-dressing room.

The tripery or meat dressing room is looked upon as a most important division, requiring the best light. The work is carried out on benches carried on wall brackets under full light of windows. Numerous sinks, with hot and cold water laid on, being interposed at frequent intervals. These discharge into an open gulley, running near well and drain.

It is found best to have this room close to the gut cleansing room, and in the largest establishments it has been found advantageous to increase the number of rooms. This department requires the most plentiful supply of hot and cold water, the former on account of the fatty nature of the material.

The central portion of the room is occupied by tanks, used for boiling certain parts (trotters, pigs' heads, etc.).

Floors in ferro-concrete have proved successful. Cement floors and concrete bricks have been well spoken of.

Pickling rooms must not be close to cold vestibules on account of the humidity they produce.

They require a temperature of about 45° F. to 50° F. Practice varies as to their position. At Barmen, Stolp and Posen they are on the ground level, but in the more recent large establishments they are put underground, e.g., Mannheim, Heidelberg, Berlin, Düsseldorf and Offenbach.

The condemned meat section comprises, in some of the smaller establishments, a special cremator designed to incinerate the meat quickly, by making provision for the molten fat to flow away, thus keeping a clear fire, which is arranged to act on meat simultaneously from above and below. There is an accessory fume cremator with separate fire. In the larger buildings valuable products are obtained by the use of high-pressure steam in closed vessels like a Washington Lyon's sterilizer, and fitted in similar way, between charging and discharging room. The boiler contains a perforated diaphragm, and is so planned that the gelatinous extract and the fat can be run off into other plant and there separated. The residue in the boiler is easily reduced to a powder with good manurial value.

Special steel hand-carts are employed, so that on condemnation of any portion it is quickly secured from control of butcher. These are made with a hopper top with a mechanical device preventing withdrawal by same opening. It is opened by a key in the condemned-meat room.

A refrigerating plant is an absolute necessity for reasons of hygiene alone.

Attempts have been made to make it pay its way by letting space to the butchers and selling ice produced by plant.

None of these, nor all combined, pay the cost of maintenance, but the addition of freezing plant to the original plan of an abattoir reduces the size and cost of the slaughter hall.

The rooms should be arranged as cooled ante-rooms with inner cold store. The former kept at 40° — 48° F., the latter at 36° — 40° F. These are very useful and important, and should be on runway from carcase-dressing hall.

The humidity of the cold rooms is as important as the temperature. The optima being for cold store 60°—75°.

It is in the chilled ante-room where the first great loss of moisture and the chief fall in tissue temperature of the carcase take place. If the meat be placed prematurely in the cold store beading of moisture takes place on the surface and superficial freezing follows, which greatly impedes the further penetration of cold.

No process involving humidity can be carried on near this, so that in all the best designs we find pig scalding and brine pickling placed at a distance.

A portion of cold store under special key is usually set aside for condemned meat under dispute awaiting final decision.

Certain large modern buildings, e.g., Berlin, have built a separate cold store for suspect material. This is an unnecessary expense.

Refrigerating rooms, even when constructed of the best materials, require cleansing and disinfection at least once annually. This may be done by washing down surfaces with soda, perflating rooms thoroughly, and then burning formalin or simple coke stoves for three days.

The ice-house system is mentioned to be condemned; it is always humid, never cold enough, and very irregular in temperature produced.

The placing of the cold store underground, though popular for a time, is now abandoned on the grounds of darkness and consequent dirtiness, and the tendency to taint owing to the humid atmosphere.

Other points in foreign practice are:-

- 1. The provision of ample stabling, sheds, and bicycle stores for the horses and vehicles connected with the abattoir traffic.
- 2. An enclosure for shepherds' and other dogs; none ever allowed to run free in buildings.
- 3. The wash-water from infected cattle lairs and slaughter place dealt with by special sterilizer before discharge into drain.
- 4. The Freibank for the sale of sterilized infected meat. This is not likely to be accepted here, nor is the meat in Germany allowed to be sold to a restaurant, nor is it used in the prisons.
 - 5. Horse and dog abattoirs exist for the preparation of their flesh as food.

Mainly about Members.

We regret to announce the death of Mr. Henry Crutchley (Member), of Wakefield. The late member was articled to his father, the late William Crutchley, at one time City Surveyor of Wakefield, and remained with him until 1884, when he commenced independent practice, which he successfully carried on until his death. Mr. Crutchley, who was fifty-one years of age, had a varied practice, principally in domestic work and business premises.

A new infants' school at Gabalfa, Glam., erected at a cost of £2,803, has been formally opened. The architect was Mr. D. Pugh-Jones, f.s.i., of Cardiff.

The new Duffryn schools erected on the main road between Cwm and Aberdeeg, Mon., have been opened. The architect was Mr. H. Waters, of Ebbw Vale, and the outlay was about £15,000.

The Town Hall, Girvan, which has been completed recently from the designs of Mr. W. J. Jennings, of Canterbury, was opened recently. The M'Master Hall, as it will be called, was built of Giffnock stone, the cost being about £20,000.

MESSRS. METCALF & GREIG have been instructed to prepare plans for a large block of Insurance Offices, Bank, Fine Art Galleries and Offices over, on the remaining portion of the War Office site in Pall Mall, immediately adjoining the Automobile Club.

MR. ALBERT E. PRIDMORE, F.S.I., Past-President, has been appointed by the exhibits committee of the Festival of Empire a juror to award medals and diplomas of merit in respect of the buildings and exhibits in the Building Trades Section, and is acting as chairman.

Messrs. Reginald C. Fry & H. Clarke, jun., of 12, Clifford's Inn, Fleet Street, have, upon the recommendation of Messrs. E. C. P. Monson, f.r.i.b.a., and E. J. Sadgrove, f.r.i.b.a., who with others, were the assessors, been awarded the first premium of £100 in connexion with the competition promoted by the *Daily Mail* for an ideal country house to cost from £900-£1,100.

The foundation stone of the new parish hall at St. Barnabas, Norwich, has been laid by the Bishop. The hall, which is to be erected on the south side of the new parish church, will be constructed of red brick with Brisley tiles, and will harmonise with the church. It will be 60ft long by 30ft wide, and will accommodate 300. The total cost is expected to be about £600. The plans were prepared by Messrs, LACEY and Upcher.

The new Foxhill Council school has been built at a cost of about £17,000. The school has been erected of local granite with brick dressings, and is equipped with every modern convenience. Accommodation is provided for 150 children, and the school is divided into four large class rooms, two of which, by the use of a sliding glass screen, can be converted into a spacious hall, 50 ft. long by 40 ft. wide. The walls are tinted pale green, and wood block floors are the order throughout the building. For the cookery classes a room has been set apart, being fitted with a modern range. The school is heated at low pressure by Messrs. Algers' system, the boiler being installed underground. The cloak rooms are well fitted, and water is laid on from large storage tanks supplied from a well on the premises. The work has been carried out under the direction of Mr. B. C. Andrew, architect.

The new Grammar School at Wolsingham, in Weardale, was recently opened. It replaces the old Grammar School, founded in 1614, and now in the hands of the Freemasons. The belfry and inscription stone have been taken down from the old school and re-erected at the new. The building is two stories in height, and planned with class rooms on three sides of an assembly hall, 48 ft. by 25 ft., and 23 ft. high to the foot beams of the open roof. It will accommodate 200 persons, and will serve as an assembly hall, gymnasium, and music room. On the ground floor are six class rooms, giving accommodation for 156 scholars. On the same floor are headmaster's room, separate rooms for assistant masters and mistresses, cloak rooms, and lavatories, and store rooms. The school is built of Witton-le-Wear stone, and is faced with pitch-faced blockers and ashlar dressings. The scholars' entrances project as wings. The accommodation for mixed teaching is about 180. The amount of the contract was £11,337. The architect was Mr. T. W. T. RICHARDSON, of Stockton-on-Tees.

The Church School for girls in connection with St. John's, at Frome, has been altered and improved from the plans of Mr. P. B. RIGG. Three separate class rooms have been provided with capacities for accommodating 32, 40, and 50 scholars respectively, or a total of 122. A corridor, 38 ft. long and 10 ft. wide, has been constructed on the south side of the school. The cloak room accommodation has been brought up-to-date, and adjoining it there is a private room for the use of the headmistress. The whole of the windows have been taken out and reconstructed; and they are so arranged that every class room at some period of the day will be well flooded with sunlight. The entire school, including cloak room and corridor, will be warmed by hot water on the low pressure system. The playground is 150 yds. in length and 50 ft. in width. The school floors have been raised 2 ft. 6 in. above the level of the roadway, thus obviating any danger from flooding in future. The class rooms are laid with ordinary joists and grooved and tongued boards; and the corridor and cloak room with wood blocks on cement concrete. The window dressings are of Bath stone. Fresh air and ventilation is admitted by means of wrought-iron winged hoppers. The contract was carried out at a cost of £750.

Index and Binding Cases.

The Index to Volume IV. is published with this issue. Binding Cases may be obtained from the Secretary, price three shillings each.

Meetings and Fixtures.

- Oct. 1st. Travelling Studentship Tour results to be submitted.
 - " ,, Last day for receiving nominations for Officers and Council.
 - 3rd, 4th, and 5th. Examinations for Membership, London, Manchester, Birmingham, Leeds, Cardiff and Oxford.
 - ,, 5th. Committee and Council Meetings.
 - " 19th. Committee and Council Meetings, followed by Annual General Meeting,

Annual General Meeting.

The Twenty-seventh Annual General Meeting of The Society of Architects will be held at 28, Bedford Square, London, W.C., on Thursday, October 19th, 1911. at 8 p.m.

Agenda:-

- 1. The President to take the chair.
- 2. Minutes of the last Annual General Meeting, and of the Special General Meeting held on May 11th.
- 3. Nominations and Announcements.
- 4. Ballot for candidates for Membership.
- 5. Council's Annual Report.
- 6. Election of Officers and Council, 1911-12.
- 7. Votes of thanks.

Light refreshments will be served after the meeting.

